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U. S. NAVAL WEATHER SERVICE COMMAND

SUMMARY OF  
SYNOPTIC METEOROLOGICAL OBSERVATIONS

NORTH ATLANTIC COASTAL MARINE AREAS

VOLUME II

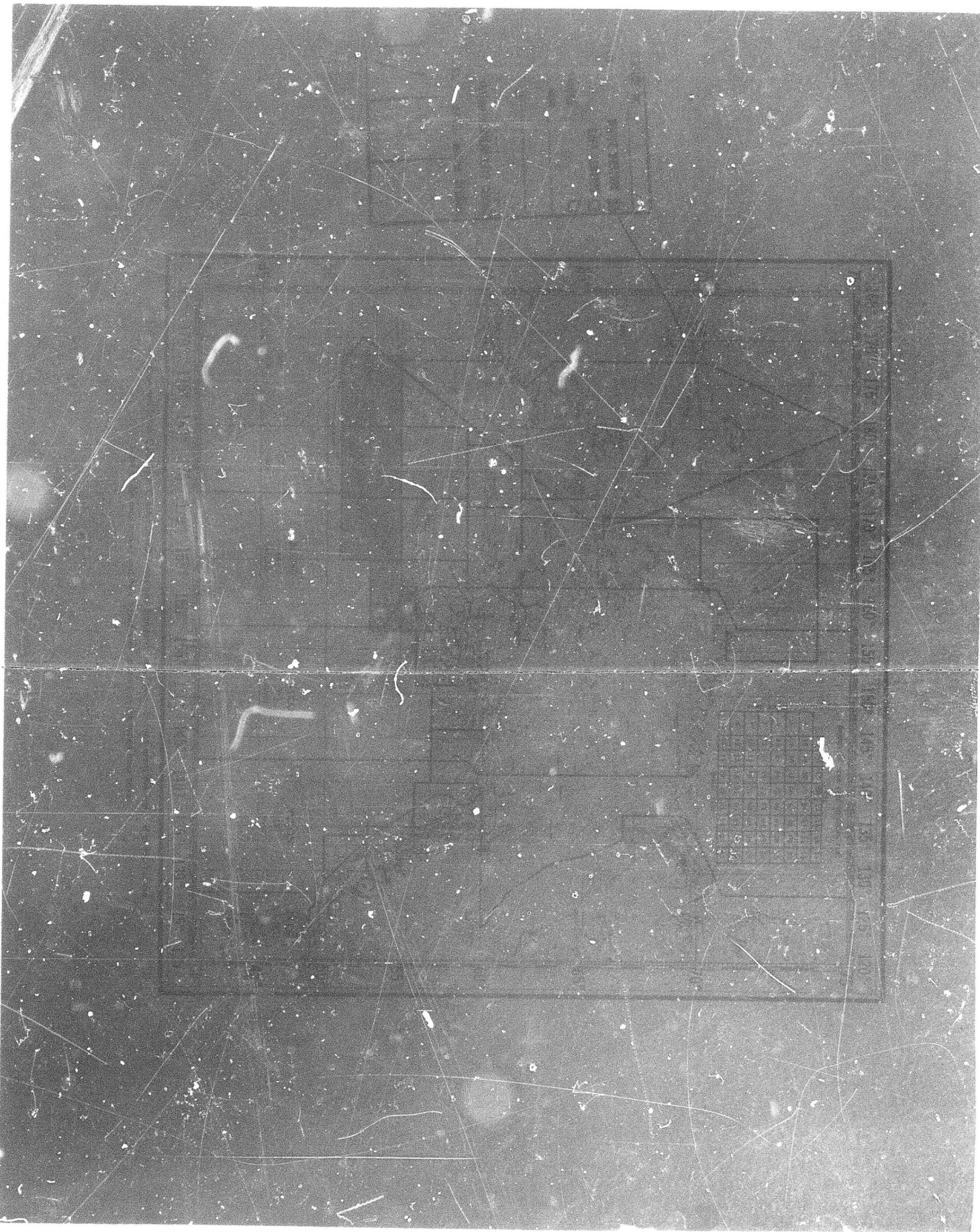
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**U. S. NAVAL WEATHER SERVICE COMMAND**

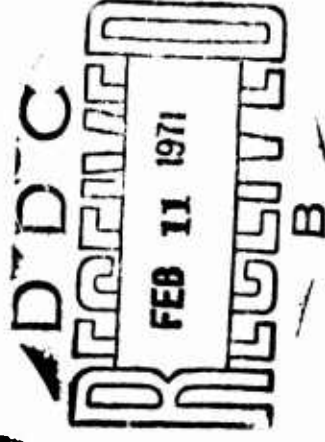
**SUMMARY OF**

**SYNOPTIC METEOROLOGICAL OBSERVATIONS**

**NORTH AMERICAN COASTAL MARINE AREAS**

**VOLUME 13**

**AREA 7 - UNIMAK**  
**AREA 8 - DUTCH HARBOR**  
**AREA 9 - ADAK**  
**AREA 10 - ATTU**





## SUMMARY OF SYNOPTIC METEOROLOGICAL OBSERVATIONS (MONTHLY AND ANNUAL)

The data contained in these tables were obtained from tape data Family 11 (TDF-11), Marine Surface Observations. TDF-11 was primarily funded by the Naval Weather Service Command and selected by NWSERD Asheville as the most comprehensive collection of marine surface observations from which to develop a series of coastal marine summaries. The source was punched cards of weather observations taken aboard vessels of varying registry. They were recorded on magnetic tape in a common format. Elements not in WMO code were converted to this code where possible. Where this was not possible, the original data were retained within the tape record as supplemental data. A very limited quality control was attempted as the punched cards were converted to taped records and, where possible, missing psychrometric data were computed.

Before the tables are prepared, extreme values of selected parameters are scrutinized so that obvious errors can be excluded. This method is necessarily subjective since the only available record of many observations is the punched card from which the tape records were prepared. Frequently there is no concrete evidence to prove or disprove the validity of questionable data.

Also, it should be noted that these data are based upon observations made by ships in passage. Such ships tend to avoid bad weather when possible, thus biasing our data toward good weather samples.

Because the number of observations may vary from one table to the other, no absolute relationship exists between the tables. As an example, air temperature counts for Tables 13 and 17 may not be identical since only observations containing both air temperature and relative humidity were counted in Table 13 and only those with both temperature and air-sea temperature difference were counted in Table 17. No requirement for simultaneous recording of all elements was made.

The primary period of record is that period (extending back in time from the most recent data) during which eighty percent of the total number of observations were recorded. The overall period is the earliest to the latest observed data used in compiling the tables. Tables 18 and 19 were tabulated from source deck 128 only and the overall period indicates the period of record of this data source. The primary period for these tables is not shown.

### THE TABLES

Percentage frequencies are computed to hundredths and rounded to tenths. An asterisk (\*) indicates percentage frequency  $> 0$  and  $< .05$ . A value followed by a plus sign indicates greater than or equal to that value (8+ means 8 or greater). NH = low cloud amount (or middle cloud amount when low clouds are not present). The hours given in this publication are GMT.

Tables 1 through 19 appear in numerical order for each month, with the annual tables appearing after the tables for December. Tables 20 and 21 appear at the end of the entire series, after the annual summary for Table 19. The series of summaries appear in numerical order by area number.

Table 1 - Percentage Frequency of Weather Occurrence by Wind Direction (16 pts.).

Table 2 - Percentage Frequency of Weather Occurrence by Hour (GMT).

Table 3 - Percentage Frequency of Wind Direction (16 pts.) by Speed and by Hour (GMT). This table includes mean wind speed (kts.) by direction (16 pts.).

Table 3A - Percentage Frequency of Wind Direction (8 pts.) by Speed and by Hour (GMT). This table includes mean wind speed (kts.) by direction.

Table 4 - Percentage Frequency of Wind Speed by Hour (GMT). This table includes mean speed by hour.

Table 5 - Percentage Frequency of Total Cloud Amount (Okts) by Wind Direction (16 pts.). This table includes mean cloud amount by wind direction.

Table 6 - Percentage Frequency of Ceiling Heights (feet, NH > 4/8) and Occurrence of NH < 5/8 by Wind Direction (16 pts.).

Table 7 - Cumulative Percentage Frequency of Occurrence of Ceiling Height (feet, NH > 4/8) and Visibility (Nautical Miles).

Table 7A - Percentage Frequency of Low Cloud Amount (or Middle Cloud Amount if Low Clouds are not present) and Percentage Frequency of Sky Obscured. Amounts are in Okts.

Table 8 - Percentage Frequency of Wind Direction (16 pts.) vs. Occurrence or Non-Occurrence of Precipitation at Observation Time with Varying Values of Visibility (Nautical Miles).

Table 9 - Percentage Frequency of Wind Direction (16 pts.) vs. Wind Speed (kts.) with Varying Values of Visibility (Nautical Miles).

Table 10 - Percentage Frequency of Ceiling Heights (feet, NH > 4/8) and Occurrence of NH < 5/8 by Hour (GMT).

Table 11 - Percentage Frequency of Visibility (Nautical Miles) by Hour (GMT).

Table 12 - Cumulative Percentage Frequency of Ranges of Visibility (Nautical Miles) and Ceiling Height (feet, NH > 4/8) by Hour (GMT).

Table 13 - Percentage Frequency of Relative Humidity (%) by Air Temperature (° F.).

Table 14 - Percentage Frequency of Wind Direction (8 pts.) by Air Temperature (° F.).

Table 15 - Means, Extremes, and Percentiles of Air Temperature (° F.) by Hour (GMT). Extreme temperatures are the one maximum and one minimum value appearing in the marine data file. The Extremes may be unrepresentative due to sampling errors. Extrapolation from the percentile values usually gives a better estimate of expected extreme conditions.

Table 16 - Percentage Frequency of Relative Humidity (%) by Hour (GMT).

Table 17 - Percentage Frequency of Air Temperature (° F.) and the Occurrence of Fog vs. Air-Sea Temperature Difference (° F.).

Air-Sea Temperature Difference is:

Positive when the air is warmer than the sea surface; Negative when the air is cooler than the sea surface. In the table heading, the limits of the temperature ranges appear in a vertical arrangement along the top of the table.

Table 18 - Percentage Frequency of Surface Wind Speed (kts.) and Direction (8 pts.) vs. Sea Height (feet). Source deck 128 for which data are available from mid-1963 was used for these tables. This deck represents the latest and most complete homogeneous source of wave data available. Here, only sea waves generated by local winds in the vicinity of the observer are summarized. This table continues for 2-1/2 pages for each month and 2-1/2 pages for the annual summary.

Table 19 - Percentage Frequency of Wave Height (feet) vs. Wave Period (seconds). In this table when both sea and swell waves are present in an observation, the higher of the two is used. If both are the same height, the longer period is chosen. When only one of the wave groups is observed, either sea or swell, it is used in the summary. Swell waves are those generated by winds distant from the local area where the observation is taken.

Tables 1-19 appear together for each month and in the annual summary. The following two tables appear at the end of the entire series for each area.

Note: In this volume, percentage frequencies at specified hours of the day refer to percentages of observations taken at those hours, rather than percentages of observations taken at all hours. Data at adjacent hours are summarized with data at synoptic hours, i.e., data from 02 and 04 GMT are combined with data from 03 GMT.

Areas covered by the North American Coastal SSMO Volumes 1-10 are listed on the outside back cover.

Table 20 - Monthly and Annual Percentage Frequencies and Means of Sea Surface Temperature ( $^{\circ}$  F.).

Table 21 - Monthly and Annual Sea Level Pressures (millibars). This table includes means by hour and for all hours, extreme values with the corresponding dates of occurrence and percentile values.

AREA	CONTENTS NAME	PAGE
7	UNIMAK	1-158
8	DUTCH HARBOR	159-316
9	ADAK	317-474
10	ATTU	475-632

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# WIND AND WEATHER CODES

CONVERSION OF WIND DIRECTION TO 8 AND 16 POINTS				VISIBILITY (VV) INTERPRETATION (NAUTICAL MILES)		PRESENT WEATHER (1960 WMO CODE 4677)				
8 POINTS	16 POINTS	36 POINTS	32 POINTS	CODE	INTERPRETATION	CODE	INTERPRETATION	CODE	INTERPRETATION	
N	{ N NNE	35, 36, 01 02, 03	32, 01 02, 03	90-93	VV<1/2	58-59 60-65 91-94 (68-69, 95, 97 IF TEMP > 40° F)	RAIN	13, 17 95-99	THUNDER LIGHTNING THUNDERSTORM	
NE	{ NE ENE	04, 05 06, 07	04, 05 06, 07	94	1/2≤VV<1					
E	{ E ESE	08, 09, 10 11, 12	08, 09 10, 11	95	1≤VV<2	80-82, (83-84 IF TEMP > 40° F)	RAIN SHOWERS	10-12 40-49	FOG (WITHOUT PRECIPITATION)	
SE	{ SE SSE	13, 14 15, 16	12, 13 14, 15	96	2≤VV<5	50-55, 58-59	DRIZZLE	04-05	SMOKE HAZE	
S	{ S SSW	17, 18, 19 20, 21	16, 17 18, 19	97	5≤VV<10	56-57 66-67	FREEZING PRECIPITATION	06-09 30-39	DUST BLOWING DUST BLOWING SNOW	
SW	{ SW WSW	22, 23 24, 25	20, 21 22, 23	98	10≤VV<25	70-75, 85-86, (68-69, 83-84, 95, 97 IF TEMP ≤40° F)	SNOW	00-03 14-16 18-29	NO SIGNIFICANT WEATHER AT OB TIME	
W	{ W WNW	26, 27, 28 29, 30	24, 25 26, 27	99	≥25	76-79	OTHER FROZEN PRECIPITATION	00-49	NO PRECIPITATION AT OB TIME	
NW	{ NW NNW	31, 32 33, 34	28, 29 30, 31	NOTE: <means less than; >means greater than; ≤means less than or equal to; ≥means greater than or equal to.					50-99	PRECIPITATION AT OB TIME
VAR	VAR	99	---							
CALM	CALM	00	00							
VAR-VARIABLE										

NOTE: The following WMO codes were counted in two weather categories. 58-59 (rain and drizzle); 68-69 (rain and snow); 93-94 (rain and hail); 96 and 99 (hail and thunder/lightning/thunderstorm); 95 and 97 (snow and thunder/lightning/thunderstorm), or (rain and thunder/lightning/thunderstorm).

WAVE HEIGHT (from source decks 128 and 116)

RECORDED CODE (HALF METERS)	RANGE (METERS)	AS RECORDED IN TABULATION (FEET)	RECORDED CODE (HALF METERS)	RANGE (METERS)	AS RECORDED IN TABULATION (FEET)	RECORDED CODE (HALF METERS)	RANGE (METERS)	AS RECORDED IN TABULATION (FEET)
00	≤.25}	<1	12	>5.75 to 6.25}	20-22	30	>14.75 to 15.25}	
01	>.25 to .75}	1-2	13	>6.25 to 6.75}		31	>15.25 to 15.75}	
02	>.75 to 1.25}	3-4	14	>6.75 to 7.25}	23-25	32	>15.75 to 16.25}	
03	>1.25 to 1.75}	5-6	15	>7.25 to 7.75}		33	>16.25 to 16.75}	49-60
04	>1.75 to 2.25}	7	16	>7.75 to 8.25}		34	>16.75 to 17.25}	
05	>2.25 to 2.75}	8-9	17	>8.25 to 8.75}	26-32	35	>17.25 to 17.75}	
06	>2.75 to 3.25}	10-11	18	>8.75 to 9.25}		36	>17.75 to 18.25}	
07	>3.25 to 3.75}	12	19	>9.25 to 9.75}				
08	>3.75 to 4.25}	13-16	20	>9.75 to 10.25}		37	>18.25 to 18.75}	
09	>4.25 to 4.75}		21	>10.25 to 10.75}	33-40	38	>18.75 to 19.25}	61-70
10	>4.75 to 5.25}	17-19	22	>10.75 to 11.25}		39	>19.25 to 19.75}	
11	>5.25 to 5.75}		23	>11.25 to 11.75}		40	>20.25 to 20.75}	
			24	>11.75 to 12.25}		41	>20.75 to 21.25}	
			25	>12.25 to 12.75}		42	>20.75 to 21.25}	
			26	>12.75 to 13.25}				
			27	>13.25 to 13.75}	41-48	43	>21.25 to 21.75}	71-86
			28	>13.75 to 14.25}		44	>21.75 to 22.25}	
			29	>14.25 to 14.75}		45	>22.25 to 22.75}	
						46	>22.75 to 23.25}	
						47	>23.25 to 23.75}	
						48	>23.75 to 24.25}	
						49	>24.25 to 24.75}	
						50	>24.75 to 25.25}	
						51	>25.25 to 25.75}	
						52	>25.75 to 26.25}	
						53-99	>26.25 to 49.75}	≥87
						Indeterminate-INDET		

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JANUARY

PERIOD: (PRIMARY) 1955-1970  
(OVER-ALL) 1905-1970

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			MAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL URS
				FRZG PCPN	SNOW	OTHER FRZN PCPN					FGD WD PCPN	SMOKE	HAZE	DUST BLWG	SIG DUST SNOW	
N	.2	.1	.0	.0	.8	.1	.0	1.1	10	.0	.1	.0	.0	.0	7.3	77
NNE	.1	.0	.1	.0	.2	.0	.0	.4	4	.0	.1	.0	.0	.0	3.6	38
NE	.1	.0	.1	.0	.1	.0	.0	.3	3	.0	.6	.0	.0	.0	4.0	44
ENE	.8	.0	.1	.0	.3	.0	.0	1.0	9	.0	.6	.0	.0	.0	3.0	41
E	2.1	.1	1.0	.0	.9	.1	.0	4.0	36	.0	1.1	.0	.0	.0	6.1	101
ESE	.7	.1	.9	.0	.2	.0	.0	1.7	15	.0	.9	.0	.0	.0	2.9	49
SE	.8	.0	1.1	.0	.2	.0	.0	2.1	19	.0	.9	.1	.0	.0	3.6	61
SSE	.4	.0	.8	.0	.2	.0	.0	1.3	12	.0	.2	.0	.0	.0	2.2	34
S	.7	.2	.6	.0	.2	.0	.0	1.5	14	.0	.3	.0	.0	.0	5.7	69
SSW	.2	.0	.1	.0	.1	.0	.0	.4	4	.0	.1	.1	.0	.0	2.6	30
SW	.2	.0	.2	.0	.0	.0	.0	.3	3	.0	.1	.2	.0	.0	4.2	44
WSW	.1	.0	.2	.0	.3	.1	.0	.8	7	.0	.1	.0	.0	.0	4.0	44
W	.2	.1	.0	.0	.6	.0	.0	.8	7	.0	.1	.0	.0	.0	7.2	73
WNW	.1	.1	.1	.0	.7	.0	.0	.8	7	.0	.1	.0	.0	.0	6.3	65
NW	.2	.0	.1	.0	.7	.0	.1	1.0	9	.0	.0	.0	.0	.0	4.4	49
NNW	.0	.0	.1	.0	.3	.1	.0	.6	5	.0	.0	.0	.0	.1	5.8	59
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
CALM	.0	.0	.1	.0	.0	.0	.0	.1	1	.0	.0	.0	.0	.0	3.0	28
TOT OBS	63	7	50	0	52	4	2	.1	165	0	48	4	1	1	688	906
TOT PCT	7.0	.8	5.5	.0	5.7	.4	.2	18.2		.0	5.3	.4	.1	.1	75.9	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			MAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL URS
				FRZG PCPN	SNOW	OTHER FRZN PCPN					FGD WD PCPN	SMOKE	HAZE	DUST BLWG	SIG DUST SNOW	
00003	6.0	.0	7.2	.0	5.6	.8	.0	16.8	42	.0	5.2	.8	.0	.0	77.2	250
06009	8.3	.4	5.2	.0	6.1	.0	.4	20.1	46	.0	4.4	.9	.0	.0	74.7	229
12015	6.2	.4	4.9	.0	4.9	.0	.0	16.0	36	.0	4.9	.0	.0	.0	79.1	225
18021	6.7	2.2	4.0	.0	5.8	.9	.4	18.4	41	.0	7.2	.0	.0	.4	74.0	223
TOT	63	7	50	0	52	4	2	17.8	165	0	50	4	1	1	707	927
PCT	6.8	.8	5.4	.0	5.6	.4	.2			.0	5.4	.4	.1	.1	76.3	100.0

JANUARY

PERIOD: (PRIMARY) 1955-1970  
(OVER-ALL) 1905-1970

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+	41+	28-40	17-27	7-16	0-6			00	03	06	09	12	15	18	21
N	.1	2.5	2.8	3.1	1.1	.3	.7	2.5	4.08	287	112	10.1	1.1	9.8	7.1	11.5	3.8	8.3	11.5	9.7	12.2
NNE	.2	1.2	1.8	1.1	.2	.0	.2	1.9	2.7	1.9	.2	.0	.0	4.2	7.1	4.6	7.7	5.7	3.8	2.5	4.9
NE	.0	1.7	2.5	.9	.2	.0	.4	2.8	5.6	2.8	.0	.0	.0	3.0	3.6	6.5	7.7	6.1	3.8	5.9	4.9
ENE	.1	1.6	1.4	1.2	.8	.0	.1	1.4	3.5	1.4	.0	.0	.0	6.1	14.3	5.0	7.7	3.0	3.8	5.5	2.4
E	.1	2.1	4.0	2.4	1.5	.0	.4	2.4	4.0	2.4	.0	.0	.0	10.2	3.6	11.2	7.7	10.0	7.7	10.1	12.2
ESE	.1	1.0	2.0	1.3	.4	.0	.4	1.3	2.5	1.3	.0	.0	.0	5.7	7.1	2.7	3.8	5.7	3.8	5.1	7.3
SE	.1	1.7	2.5	2.6	.4	.0	.4	1.8	3.0	2.6	.0	.0	.0	8.0	14.3	8.5	7.7	3.9	.0	8.0	9.8
SSE	.0	.4	2.2	.6	.3	.1	.3	1.3	2.2	.6	.0	.0	.0	3.8	.0	3.5	7.7	3.9	3.8	3.4	2.4
S	.0	1.7	3.7	1.3	.2	.2	.2	.8	1.7	1.3	.0	.0	.0	7.2	7.1	5.8	7.7	7.0	11.5	7.2	9.8
SSW	.0	.6	1.7	.8	.2	.0	.2	.9	2.2	.8	.0	.0	.0	2.3	.0	2.7	3.8	4.8	11.5	3.4	2.4
SW	.0	1.3	2.2	.9	.3	.0	.3	1.4	1.6	.9	.0	.0	.0	2.7	3.6	3.8	11.5	7.0	7.7	4.6	4.9
WSW	.1	1.0	1.6	1.4	.4	.0	.4	1.7	1.7	1.4	.0	.0	.0	4.2	3.6	5.4	7.7	3.9	3.8	4.6	4.9
W	.0	2.8	1.7	2.9	.4	.0	.4	2.9	3.1	2.9	.0	.0	.0	6.4	7.1	7.7	.0	10.0	3.8	9.7	2.4
WNW	.1	1.2	3.1	1.8	1.2	.0	.2	1.8	3.1	1.8	.0	.0	.0	11.7	7.1	6.2	3.8	4.8	15.4	5.1	9.8
NW	.1	1.0	1.6	1.4	1.3	.2	.2	1.4	1.6	1.4	.0	.0	.0	4.5	7.1	5.8	11.5	6.1	3.8	5.9	4.9
NNW	.0	1.2	1.8	2.1	1.3	.3	.3	2.1	1.8	2.1	.0	.0	.0	6.8	7.1	6.2	.0	7.0	3.8	7.6	4.9
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	2.5	255	408	287	112	12	.7	287	36.7	25.8	28	2.5	.0	3.4	.0	3.1	.0	3.0	.0	1.7	.0
TOT OBS	38	22.9	36.7	25.8	10.1	1.1	.7	287	36.7	25.8	1112	19.2	.0	264	28	260	26	230	26	237	41
TOT PCT	3.4	22.9	36.7	25.8	10.1	1.1	.7	287	36.7	25.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-6	7-16	17-27	28-40	41+	28-40	17-27	7-16	0-6	00	03	06	09	12	15	18	21	00	03	06	09
N	1.4	4.9	4.7	2.5	.7	2.5	4.7	4.9	1.4	14.0	14.3	16.2	11.5	13.9	15.4	12.2	17.1	14.0	14.3	16.2	11.5
NE	1.2	4.5	2.7	1.9	.2	1.9	2.7	4.5	10.4	9.1	17.9	11.5	15.4	9.1	7.7	11.4	7.3	9.1	17.9	11.5	15.4
E	1.1	5.1	5.6	2.8	.4	2.8	5.6	5.1	15.0	15.9	10.7	13.8	11.5	15.7	11.5	15.2	19.5	15.9	10.7	13.8	11.5
SE	.9	4.2	3.5	2.2	.1	2.2	3.5	4.2	10.9	11.7	14.3	11.9	15.4	7.8	3.8	11.4	12.2	11.7	14.3	11.9	15.4
S	.4	5.1	3.4	1.1	.4	1.1	3.4	5.1	10.3	9.5	7.1	8.5	11.5	11.7	23.1	10.5	12.2	9.5	7.1	8.5	11.5
SW	1.4	3.1	3.0	1.5	.2	1.5	3.0	3.1	9.3	6.8	7.1	9.2	19.2	10.9	11.5	9.3	9.8	6.8	7.1	9.2	19.2
W	.9	6.4	4.7	2.5	.6	2.5	4.7	6.4	15.1	18.2	14.3	13.8	3.8	14.8	19.2	14.8	12.2	18.2	14.3	13.8	3.8
NW	1.3	3.1	3.0	3.8	1.1	3.8	3.0	3.1	12.2	11.4	14.3	11.9	11.5	13.0	7.7	13.5	9.8	11.4	14.3	11.9	11.5
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	2.5	406	339	203	.4	203	339	406	2.5	3.4	.0	3.1	.0	3.0	.0	1.7	.0	3.4	.0	3.1	.0
TOT OBS	123	36.5	30.5	18.3	3.7	18.3	30.5	36.5	100.0	264	28	260	26	230	26	237	41	264	28	260	26
TOT PCT	11.1	36.5	30.5	18.3	3.7	18.3	30.5	36.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

JANUARY

PERIOD: (PRIMARY) 1955-1970  
(OVER-ALL) 1905-1970

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	1-3	4-10	11-21	22-33	34-47	48+	CALM	MEAN	PCT FREQ	TOTAL OBS
00003	.3	24.0	32.5	29.8	8.9	1.4	3.1	19.5	100.0	292
06009	.3	23.4	34.3	26.9	11.5	.7	2.8	19.3	100.0	286
12015	2.0	17.6	40.6	25.8	10.2	1.2	2.7	19.5	100.0	256
18021	1.1	26.3	39.9	20.5	9.7	1.1	1.4	18.5	100.0	278
TOT	10	255	408	287	112	12	28	19.2		1112
PCT	.9	22.9	36.7	25.8	10.1	1.1	2.5		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8-10	TOTAL OBS	MEAN CLOUD COVER
N	2.5	1.1	3.7	2.2	79	5.0
NNE	1.3	.6	1.3	1.3	38	4.7
NE	.7	.8	1.2	2.0	40	5.6
ENE	.2	.2	1.2	2.9	38	6.8
E	.8	.4	1.4	8.2	90	7.1
ESE	.1	.1	.6	4.1	41	7.5
SE	.2	.4	1.4	3.5	46	6.9
SSE	.0	.7	.1	2.6	29	7.1
S	.5	.4	.1	2.8	58	6.6
SSW	.2	1.0	1.3	.6	26	5.3
SW	1.1	.5	1.8	1.0	36	5.0
WSW	.5	1.0	1.7	1.7	40	5.6
W	1.3	1.6	3.1	1.8	65	5.2
WNW	1.2	1.4	3.5	2.2	69	5.4
NW	1.2	.5	2.5	2.0	52	5.6
NNW	1.8	1.2	2.4	1.8	60	4.8
VAR	.0	.0	.0	.0	0	.0
CALM	.8	.8	.6	.8	26	4.2
TOT OBS	122	105	256	350	833	5.8
TOT PCT	14.6	12.6	30.7	42.0	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	000	150	300	600	1000	2000	3500	5000	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.1	.1	.2	.7	1.7	2.3	.1	.0	.0	.0	79
NNE	.0	.1	.1	.1	1.0	.8	.1	.0	.0	.0	38
NE	.5	.1	.4	.6	.5	.7	.1	.0	.0	.0	40
ENE	.5	.4	.0	.2	1.7	.7	.1	.0	.0	.1	38
E	1.7	.7	.5	1.7	1.8	2.5	.0	.0	.0	.4	90
ESE	.7	.0	.5	1.0	1.1	1.2	.0	.0	.0	.5	41
SE	.6	.1	.5	.7	1.7	.7	.4	.0	.0	.7	46
SSE	.4	.0	.2	.4	1.2	.4	.0	.0	.0	.0	29
S	.4	.0	.1	.8	2.3	1.6	.1	.0	.0	.4	58
SSW	.0	.0	.1	.6	.7	.4	.1	.0	.0	.0	26
SW	.4	.0	.2	.4	.8	.5	.1	.0	.0	.0	36
WSW	.0	.1	.0	.1	1.2	.7	.1	.2	.0	.0	40
W	.4	.0	.0	.6	1.7	.8	.0	.2	.1	.1	65
WNW	.1	.0	.0	1.0	2.3	1.0	.5	.0	.0	.0	69
NW	.4	.2	.1	1.0	1.8	.4	.1	.0	.0	.2	52
NNW	.4	.0	.0	.7	1.7	.7	.0	.0	.0	.0	60
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOT OBS	53	16	25	88	194	136	17	4	4	10	833
TOT PCT	6.4	1.9	3.0	10.6	23.3	16.3	2.0	.5	.5	1.2	100.0



PERIOD: (PRIMARY) 1955-1970  
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AREA 0007 UNIMAK  
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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH > 4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	1.5	1.5	1.5	1.7	1.7	1.7	1.7	1.7
= OR >5000	1.9	2.0	2.0	2.1	2.1	2.1	2.1	2.1
= OR >3500	3.9	4.0	4.1	4.3	4.3	4.3	4.3	4.3
= OR >2000	12.7	18.0	20.5	20.7	20.7	20.7	20.7	20.7
= OR >1000	24.8	37.4	42.3	43.4	43.8	43.8	43.8	43.8
= OR >600	28.4	46.1	51.5	53.4	54.0	54.1	54.1	54.1
= OR >300	29.4	48.2	54.1	56.3	56.9	57.1	57.1	57.1
= OR >150	29.4	48.8	55.1	58.1	58.8	59.0	59.0	59.0
= OR > 0	29.6	50.2	57.5	61.3	62.4	64.7	65.3	65.5
TOTAL	250	424	485	517	527	546	551	553

TOTAL NUMBER OF OBS: 844 PCT FREQ NH <5/8: 34.5

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	TOTAL							
	0	1	2	3	4	5	6	7
7.9	3.5	8.0	7.1	7.9	7.4	10.4	8.9	32.7
								6.4
								891

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PERIOD: (PRIMARY) 1955-1970  
(OVER-ALL) 1905-1970

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NÉ	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.0	.0	.0	.1	.1	.0	.1	.0	.0	.0	.1	.1	.0	.0	.1	.0	.0	6	.7
NO PCP	.0	.0	.1	.7	.2	.6	.1	.2	.0	.1	.0	.0	.0	.0	.2	.0	.0	22	2.4
TOTAL	0	0	1	7	3	5	2	2	0	1	1	1	0	0	3	0	0	28	3.1
1/2<1	.0	.0	.0	.1	.1	.0	.0	.1	.1	.0	.1	.0	.0	.0	.0	.0	.0	5	.6
NO PCP	.0	.0	.1	.1	.1	.0	.1	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0	8	.9
TOTAL	0	0	1	2	2	0	1	3	2	0	1	0	0	0	0	0	0	13	1.4
1<2	.2	.1	.1	1.1	.1	.2	.2	.1	.1	.0	.0	.0	.1	.1	.0	.0	.0	24	2.7
NO PCP	.0	.2	.0	.3	.3	.1	.2	.0	.1	.0	.0	.2	.0	.0	.1	.0	.0	18	2.0
TOTAL	2	3	1	13	4	3	4	1	2	0	0	2	1	1	1	0	0	42	4.7
2<5	.4	.1	.1	.3	.9	.6	.4	.4	.1	.0	.2	.0	.2	.1	.1	.0	.1	55	6.1
NO PCP	.0	.0	.4	.2	1.1	.3	.2	.2	.1	.3	.2	.2	.0	.0	.4	.0	.0	42	4.7
TOTAL	4	1	5	5	18	8	6	6	2	3	4	2	2	1	5	0	1	97	10.8
5<10	.4	.2	.1	.3	.4	1.3	.4	.9	.1	.3	.1	.6	.3	.7	.1	.0	.0	63	7.0
NO PCP	1.9	.4	1.0	.9	1.1	1.6	.4	1.7	.8	1.0	1.6	2.1	1.8	1.0	1.2	.0	.7	195	21.6
TOTAL	21	6	10	28	14	26	8	23	8	12	15	24	19	15	12	0	6	258	28.6
10+	.1	.0	.0	.1	.0	.0	.1	.0	.0	.0	.2	.1	.1	.0	.2	.0	.0	11	1.2
NO PCP	5.5	3.1	2.8	2.8	.8	2.1	1.3	3.7	1.8	3.1	2.3	4.8	4.7	3.4	4.0	.0	2.3	453	50.2
TOTAL	51	28	25	27	7	19	13	33	16	28	23	44	43	31	38	0	21	464	51.4
TOTAL PCT	78 8.6	38 4.2	43 4.8	100 11.1	48 5.3	61 6.8	34 3.8	68 7.5	30 3.3	44 4.9	44 4.9	73 8.1	65 7.2	48 5.3	59 6.5	0	28 3.1	902 100.0	

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PERIOD: (PRIMARY) 1955-1970  
(OVER-ALL) 1905-1970

AREA 0007 UNIMAK  
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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	4-10	.0	.0	.0	.1	.4	.0	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	8	.7
	11-21	.0	.0	.1	.1	.0	.2	.3	.0	.1	.0	.1	.1	.0	.0	.0	.0	.0	.0	10	.9
	22+	.0	.0	.0	.0	.3	.1	.0	.1	.1	.0	.0	.0	.1	.0	.1	.3	.0	.0	11	1.0
	TOTAL	0	0	1	2	7	3	5	2	2	0	1	1	1	0	1	3	0	0	29	2.6
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	4-10	.0	.0	.1	.0	.1	.1	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	4	.4
	11-21	.0	.0	.0	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2	.2
	22+	.0	.0	.0	.1	.0	.0	.0	.1	.3	.2	.0	.0	.0	.0	.0	.0	.0	.0	7	.6
	TOTAL	0	0	1	2	1	2	0	1	3	2	0	1	0	0	0	0	0	0	13	1.2
1<2	0-3	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1	.1
	4-10	.0	.1	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	.3
	11-21	.0	.1	.0	.0	.1	.2	.3	.2	.0	.1	.0	.0	.1	.2	.0	.1	.0	.0	14	1.3
	22+	.2	.1	.1	.5	1.0	.1	.0	.1	.1	.1	.0	.0	.1	.0	.1	.0	.0	.0	26	2.4
	TOTAL	2	3	1	5	13	4	3	4	1	2	0	0	2	2	1	1	0	0	44	4.0
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	1	.1
	4-10	.0	.1	.1	.2	.4	.3	.2	.1	.0	.0	.1	.0	.1	.0	.0	.1	.0	.0	17	1.5
	11-21	.1	.1	.3	.2	1.0	.7	.5	.4	.5	.2	.1	.3	.0	.2	.0	.1	.0	.0	50	4.5
	22+	.4	.0	.1	.1	1.0	.7	.4	.1	.0	.0	.1	.2	.2	.1	.1	.4	.0	.0	41	3.7
	TOTAL	5	2	5	5	26	19	11	6	6	2	3	5	3	3	1	6	0	1	109	9.9
5<10	0-3	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.5	9	.8
	4-10	.5	.1	.5	.4	.4	.2	.8	.0	.5	.1	.3	.1	.4	.1	.0	.2	.0	.0	50	4.5
	11-21	.9	.2	.3	.3	1.1	.5	.8	.6	1.2	.4	.3	.4	.5	.8	.8	.1	.0	.0	101	9.2
	22+	1.0	.3	.5	.5	1.2	.6	1.0	.5	.5	.4	.6	.9	1.6	1.0	1.2	.9	.0	.0	140	12.7
	TOTAL	27	8	14	13	29	15	29	12	25	9	13	16	28	21	22	13	0	6	300	27.2
10+	0-3	.1	.0	.0	.1	.1	.0	.1	.0	.0	.0	.0	.0	.0	.1	.1	.0	.0	1.9	27	2.4
	4-10	2.0	.9	1.0	1.0	.8	.4	.5	.2	1.2	.5	.8	.8	2.4	1.1	1.0	.9	.0	.0	171	15.5
	11-21	1.8	1.5	1.8	.8	1.9	.3	.7	1.0	1.9	1.0	1.7	.9	1.1	1.9	.6	1.5	.0	.0	226	20.5
	22+	2.9	.9	.5	.8	.5	.3	1.6	.2	.5	.4	.5	.8	1.4	1.9	1.5	2.1	.0	.0	184	16.7
	TOTAL	75	36	36	30	36	10	33	15	40	21	33	28	53	55	36	50	0	21	608	55.1
	TOTAL	109	49	58	57	112	53	81	40	77	36	50	51	87	31	61	73	0	28	1103	100.0
	PCT	9.9	4.4	5.3	5.2	10.2	4.8	7.3	3.6	7.0	3.3	4.5	4.6	7.9	7.3	5.5	6.6	.0	2.5	100.0	



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PERIOD: (PRIMARY) 1955-1970  
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8), AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	5.9	.8	4.2	7.2	21.1	19.4	3.8	.8	.0	1.3	64.6	35.4	237
06009	8.4	3.3	2.8	10.3	20.6	16.8	1.9	.9	.9	.9	66.8	33.2	214
12015	6.3	1.0	1.5	10.7	25.7	15.5	1.0	.0	.5	1.0	63.1	36.9	206
18021	6.7	2.4	2.9	13.0	23.1	13.0	1.4	.0	.5	1.4	64.4	35.6	208
TOT	59	16	25	88	195	141	18	4	4	10	560	305	865
PCT	6.8	1.8	2.9	10.2	22.5	16.3	2.1	.5	.5	1.2	64.7	35.3	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	3.9	1.7	5.2	5.6	21.0	62.7	233
06009	3.3	.5	5.3	7.7	26.3	56.9	209
12015	2.5	.5	2.0	8.5	28.5	58.0	200
18021	3.0	2.0	3.0	8.9	27.2	55.9	202
TOT	27	10	33	64	216	494	844
PCT	3.2	1.2	3.9	7.6	25.6	58.5	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET, NH >4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00003	5.6	12.0	25.3	40.3	34.3	233
06009	7.7	14.8	29.7	37.8	32.5	209
12015	6.0	9.0	26.5	37.5	36.0	200
18021	6.9	12.9	33.7	33.7	32.7	202
TOT	55	103	242	316	286	844
PCT	6.5	12.2	28.7	37.4	33.9	100.0

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TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP										TOTAL OBS	PCT FREQ
	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100				
45/49	.0	.0	.0	.0	.2	.3	.9	.8			14	2.2
40/44	.0	.2	.5	.2	2.4	5.7	5.8	7.9			143	22.6
35/39	.0	.0	.0	1.1	3.6	6.8	14.7	20.5			297	46.8
30/34	.0	.0	.0	.0	1.6	2.8	7.3	6.8			120	18.9
25/29	.0	.0	.0	.0	.3	1.4	1.3	2.2			33	5.2
20/24	.0	.0	.0	.0	.0	1.1	.5	2.2			24	3.8
15/19	.0	.0	.0	.0	.0	.0	.3	.2			3	.5
TOTAL	0	1	4	11	51	115	195	257			634	100.0
PCT	.0	.2	.6	1.7	8.0	18.1	30.8	40.5				

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP										
TEMP F	N	NE	E	SE	S	SW	W	NW	VAR	CALM
45/49	.0	.3	1.1	.3	.2	.0	.3	.0	.0	.0
40/44	2.2	1.6	3.9	4.7	3.2	2.2	4.3	.5	.0	.0
35/39	6.0	5.5	5.2	4.6	6.5	6.2	7.9	4.3	.0	.8
30/34	5.8	2.8	.9	.3	.0	1.1	3.8	3.9	.0	.2
25/29	2.1	.3	.2	.0	.0	.0	.6	2.1	.0	.0
20/24	1.1	.3	.2	.0	.0	.0	.9	1.3	.0	.0
15/19	.0	.0	.0	.0	.0	.0	.2	.3	.0	.0
TOTAL	109	69	73	63	62	60	114	78	0	6
PCT	17.2	10.9	11.5	9.9	9.8	9.5	18.0	12.3	.0	.9

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	47	46	43	38	25	18	17	36.5	291
06009	46	44	43	37	24	18	16	35.7	285
12015	45	43	41	37	22	15	14	35.0	259
18021	47	45	43	37	22	16	14	35.2	282
TOT	47	45	42	37	23	17	14	35.6	1117

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR								TOTAL
HOUR (GMT)	0-29	30-59	60-69	70-79	80-89	90-100	MEAN	OBS
00003	.0	1.8	11.4	18.6	31.1	37.1	84	167
06009	.0	1.8	5.5	20.7	26.2	45.7	86	164
12015	.0	4.2	9.8	11.2	41.3	33.6	84	143
18021	.0	2.5	5.6	21.1	25.5	45.3	85	161
TOT	0	16	51	115	195	258	85	635

PERIOD: (PRIMARY) 1955-1970  
(OVER-ALL) 1905-1970

JANUARY

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	13	17	21	25	29	33	37	41	45	TOT	W FOG	WU FOG
9/10	.0	.0	.0	.0	.0	.0	.0	.0	.1	1	.0	.1
7/8	.0	.0	.0	.0	.0	.0	.0	.0	.4	3	.0	.4
6	.0	.0	.0	.0	.0	.0	.1	.0	.1	2	.0	.2
5	.0	.0	.0	.0	.0	.0	.2	.4	.4	8	.0	1.0
4	.0	.0	.0	.0	.0	.0	.0	1.3	.5	15	.4	1.4
3	.0	.0	.0	.0	.0	.0	.7	1.6	.0	19	.2	2.0
2	.0	.0	.0	.0	.0	.1	2.8	2.4	.1	45	.8	4.6
1	.0	.0	.0	.0	.0	.2	6.0	1.3	.0	63	.5	7.1
0	.0	.0	.0	.0	.0	1.2	7.2	1.2	.0	80	1.1	8.5
-1	.0	.0	.0	.0	.0	1.4	6.6	.4	.0	70	.8	7.6
-2	.0	.0	.0	.1	.0	2.4	10.0	.2	.0	106	.8	11.9
-3	.0	.0	.0	.0	.4	2.8	4.1	.1	.0	61	.2	7.1
-4	.0	.0	.0	.0	.1	6.4	2.2	.1	.0	73	.2	8.5
-5	.0	.0	.0	.2	.7	5.0	1.1	.1	.0	60	.1	7.1
-6	.0	.0	.0	.2	.6	3.4	.5	.0	.0	39	.2	4.4
-7/-8	.0	.0	.0	.2	2.3	2.9	.6	.0	.0	50	.1	5.9
-9/-10	.0	.0	.0	.6	3.6	1.8	.1	.0	.0	51	.1	6.0
-11/-13	.0	.0	.1	1.0	.6	.5	.0	.0	.0	18	.0	2.2
-14/-16	.0	.1	.7	1.2	.6	.0	.0	.0	.0	22	.0	2.6
-17/-19	.4	.5	1.0	.8	.0	.0	.0	.0	.0	22	.0	2.6
-20/-22	.4	.2	.6	.6	.0	.0	.0	.0	.0	15	.0	1.8
-23/-25	.0	.8	.2	.0	.0	.0	.0	.0	.0	9	.0	1.1
-26/-30	.0	.2	.0	.0	.0	.0	.0	.0	.0	2	.0	.2
TOTAL	.6	.16	.22	.42	.74	.234	.351	.76	.13	834	.48	786
PCT	.7	1.9	2.6	5.0	8.9	28.1	42.1	9.1	1.6	100.0	5.8	94.2

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N						NE						TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	1-3	4-10	11-21	22-33	34-47	48+			
<1	.0	.0	.0	.0	.0	.0	.0	.7	.0	.0	.0	.0	0	.0	3
1-2	.0	2.2	.0	.0	.0	.0	.0	.5	.0	.0	.0	.0	9	.0	2
3-4	.0	.5	1.2	.2	.0	.0	.0	.2	1.7	.5	.0	.0	8	.0	10
5-6	.0	.2	.7	.7	.2	.0	.0	.0	1.0	.2	.2	.0	8	.0	6
7	.0	.2	.5	.2	.2	.0	.0	.0	.5	.5	.0	.0	5	.0	4
8-9	.0	.0	.7	.5	.2	.0	.0	.0	.0	.0	.0	.0	5	.0	0
10-11	.0	.0	.0	.2	.2	.0	.0	.0	.0	.0	.0	.0	2	.0	0
12	.0	.0	.0	.2	.0	.0	.0	.0	.0	.2	.0	.0	1	.0	1
13-16	.0	.0	.0	.0	.2	.0	.0	.0	.0	.2	.0	.0	1	.0	1
17-19	.0	.0	.0	.2	.2	.0	.0	.0	.0	.0	.2	.0	2	.0	0
20-22	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	1	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	0	13	14	10	5	0	0	6	13	7	2	0	42	0	28
PCT	.0	3.2	3.5	2.5	1.2	.0	.0	1.5	3.2	1.7	.5	.0	10.4	.0	7.0

HGT	E						SE						TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	1-3	4-10	11-21	22-33	34-47	48+			
<1	.0	2.5	.0	.0	.0	.0	.0	.7	.0	.0	.0	.0	10	.0	3
1-2	.0	1.0	.5	.0	.0	.0	.0	.0	1.0	.0	.0	.0	6	.0	4
3-4	.0	1.5	2.5	.7	.0	.0	.0	.7	1.2	.2	.0	.0	19	.0	9
5-6	.0	.2	1.2	1.0	.0	.0	.0	.2	2.5	.0	.0	.0	10	.0	11
7	.0	.0	1.0	.2	.0	.0	.0	.0	1.2	.5	.0	.0	5	.0	7
8-9	.0	.5	.7	.7	.0	.0	.0	.0	.2	.2	.0	.0	8	.0	2
10-11	.0	.0	.2	2.0	.5	.0	.0	.0	.0	.2	.0	.0	11	.0	1
12	.0	.0	.2	.7	.0	.0	.0	.0	.0	.0	.0	.0	4	.0	0
13-16	.0	.0	.2	.0	.0	.2	.0	.0	.0	.0	.0	.0	2	.0	0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
20-22	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	1	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	0	23	28	22	2	1	0	7	25	5	0	0	76	0	37
PCT	.0	5.7	7.0	5.5	.5	.2	.0	1.7	6.2	1.2	.0	.0	18.9	.0	9.2

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S					TOTAL	1-3	SW					48+	TOTAL
	1-3	4-10	11-21	22-33	34-47			1-3	4-10	11-21	22-33	34-47		
<1	.0	.7	.0	.0	.0	3	.0	.0	1.2	.0	.0	.0	.0	9
1-2	.0	.5	.5	.0	.0	4	.0	.0	.7	1.5	.0	.0	.0	12
3-4	.0	1.0	2.7	.2	.0	16	.0	.0	.5	2.0	.5	.0	.0	9
5-6	.0	.2	1.7	.2	.0	9	.0	.0	.5	1.2	.5	.0	.0	4
7	.0	.0	.7	.7	.0	6	.0	.0	.0	.5	.5	.0	.0	4
8-9	.0	.0	.5	1.2	.0	7	.0	.0	.0	.2	.7	.0	.0	3
10-11	.0	.0	.2	.0	.0	1	.0	.0	.0	.2	.5	.0	.0	0
12	.0	.0	.0	.5	.2	3	.0	.0	.0	.0	.0	.2	.0	0
13-16	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.2	.0	.0	0
17-19	.0	.0	.2	.0	.0	1	.0	.0	.0	.0	.0	.0	.0	1
20-22	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.2	.0	.0	1
26-32	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.2	.0	1
33-40	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	.0	2.5	6.7	3.0	1.2	50	.0	.0	3.0	5.7	1.3	.5	.0	50
PCT						12.4					3.2			12.4

HGT	W					TOTAL	1-3	NW					48+	TOTAL	GRAND TOTAL
	1-3	4-10	11-21	22-33	34-47			1-3	4-10	11-21	22-33	34-47			
<1	.0	1.0	.0	.0	.0	4	.2	.2	1.7	.0	.0	.0	.0	8	36
1-2	.0	1.5	.7	.0	.0	9	.0	1.0	.2	.2	.0	.0	.0	5	48
3-4	.0	2.0	3.2	1.0	.0	25	.0	.2	.7	.7	.2	.0	.0	5	104
5-6	.0	.5	.5	.5	.0	6	.0	.2	.5	.5	.5	.5	.0	7	66
7	.0	.0	1.0	1.0	.0	8	.0	.0	1.0	.2	.7	.2	.0	7	46
8-9	.0	.0	.2	1.5	.2	8	.0	.0	.0	.0	1.7	.0	.0	4	38
10-11	.0	.2	.0	.2	.0	2	.0	.0	.0	.2	.2	.2	.0	7	28
12	.0	.0	.0	.7	.5	1	.0	.0	.0	.2	.0	.2	.0	3	13
13-16	.0	.0	.0	.0	.0	5	.0	.0	.0	.0	.0	.7	.0	3	14
17-19	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.2	.0	1	4
20-22	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.2	.0	1	1
23-25	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	0
26-32	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	0
33-40	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	0
41-48	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	0
49-60	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	0
61-70	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	0
71-86	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	0
87+	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	0
TOTAL	.0	5.2	5.7	5.0	1.0	68	.2	3.2	1.3	2.7	4.0	2.5	.0	51	402
PCT						16.5								12.7	100.0



PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1970

JANUARY

AREA 0007 UNIMAK  
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TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	5.0	8.3	.0	.0	.0	.0					56
1-2	.0	7.1	4.3	.0	.0	.0					48
3-4	.2	6.4	14.7	3.5	.0	.0					105
5-6	.0	2.1	9.0	3.5	.9	.0					66
7	.0	.2	6.1	4.0	.5	.0					46
8-9	.0	.5	2.6	5.4	.5	.0					38
10-11	.0	.2	.7	5.0	.7	.0					28
12	.0	.0	.5	1.9	.7	.0					13
13-14	.0	.0	.2	.9	1.9	.2					14
17-19	.0	.0	.2	.2	.5	.0					4
20-22	.0	.0	.5	.2	.2	.0					4
23-25	.0	.0	.0	.0	.2	.0					1
26-32	.0	.0	.0	.0	.0	.0					0
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	22	105	164	105	26	1					423
PCT	5.2	24.8	38.8	24.8	6.1	.2					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	2.3	7.1	14.4	6.1	3.5	5.0	.8	.2	.8	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	211	4
6-7	.0	.4	3.5	3.6	5.0	2.5	3.5	.8	.6	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	105	7
8-9	.0	.0	1.3	3.1	2.7	2.9	2.7	.8	2.5	.2	.0	.2	.0	.0	.0	.0	.0	.0	.0	85	8
10-11	.0	.0	.0	3.1	.8	2.5	.6	.8	.8	.2	.0	.0	.2	.0	.0	.0	.0	.0	.0	45	8
12-13	.0	.0	.0	.0	.2	.2	.8	.6	.0	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	11	11
>13	.0	.0	.0	.2	.0	.0	.2	.2	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	6	14
INDET	10.7	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	57	0
TOTAL	68	39	100	85	63	68	44	17	24	7	4	1	1	0	0	0	0	0	0	521	5
PCT	13.1	7.5	19.2	16.3	12.1	13.1	8.4	3.3	4.6	1.3	.8	.2	.2	.0	.0	.0	.0	.0	.0	100.0	

FEBRUARY

PERIOD: (PRIMARY) 1953-1970  
(OVER-ALL) 1904-1970

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FDG WD PCPN	SMOKE HAZE	DUST BLWG	NO DUST SNOW	
N	.1	.0	.3	.0	.0	.0	.0	.0	3	.0	.0	.0	.1	6.3	54
NNE	.1	.0	.1	.0	.4	.1	.0	.0	5	.0	.4	.0	.0	3.8	38
NE	.3	.0	.6	.0	.5	.1	.0	1.5	12	.0	.5	.1	.0	3.6	46
ENE	.8	.0	.6	.0	.9	.0	.0	2.1	17	.0	.3	.0	.0	3.1	44
E	.4	.0	1.4	.0	.9	.0	.0	2.6	21	.0	.5	.1	.0	3.9	57
ESE	.6	.0	.4	.0	.3	.0	.0	1.1	9	.0	.1	.0	.0	2.3	28
SE	.5	.0	.4	.0	.1	.0	.0	1.0	8	.0	.4	.1	.0	4.4	47
SSE	1.1	.0	1.1	.0	.4	.0	.0	2.4	19	.0	.6	.0	.0	3.1	49
S	1.3	.0	.6	.0	.3	.0	.0	2.1	17	.0	1.4	.0	.0	4.3	62
SSW	.5	.0	.4	.0	.0	.1	.0	1.0	8	.0	.4	.0	.0	3.0	35
SW	.6	.0	.1	.0	.5	.0	.0	1.3	10	.0	1.5	.0	.0	7.5	82
WSW	.1	.0	.0	.0	.1	.0	.0	.3	2	.0	.5	.0	.0	5.0	46
W	.4	.1	.5	.0	.9	.0	.0	1.6	13	.0	.3	.0	.0	9.2	88
WNW	.0	.1	.0	.0	.6	.0	.0	.9	7	.0	.1	.1	.0	4.0	41
NW	.3	.0	.1	.0	.9	.0	.0	1.4	11	.0	.0	.0	.0	3.6	40
NNW	.3	.0	.3	.0	.5	.0	.1	1.0	8	.0	.1	.0	.0	3.4	36
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
CALM	.0	.0	.1	.0	.0	.0	.0	.1	1	.0	.0	.0	.0	.4	4
TOT OBS	58	2	56	0	57	3	4	.1	171	0	56	4	1	565	797
TOT PCT	7.3	.3	7.0	.0	7.2	.4	.5	21.5		.0	7.0	.5	.1	70.9	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FDG WD PCPN	SMOKE HAZE	DUST BLWG	NO DUST SNOW	
00003	7.0	.5	6.5	.0	7.5	.5	.9	21.5	46	.0	7.0	.5	.5	70.6	214
06009	6.2	.0	7.7	.0	8.2	.5	.5	23.1	45	.0	7.2	.5	.0	69.2	195
12015	6.2	.5	6.2	.0	8.7	.0	.0	20.0	39	.0	6.7	.0	.0	73.3	195
18021	9.6	.0	7.6	.0	4.0	.5	.5	20.7	41	.0	7.6	1.0	.0	70.7	198
TOT	58	2	56	0	57	3	4		171	0	57	4	1	569	802
PCT	7.2	.2	7.0	.0	7.1	.4	.5	21.3		.0	7.1	.5	.1	70.9	100.0

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PERIOD: (PRIMARY) 1953-1970  
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AREA 0007 UNIMAK  
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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)					
	0-3	4-10	11-21	22-33	34-47	48+	00	03	06	09				12	15	18	21		
N	.1	1.6	1.9	1.6	.8	.1	61	6.2	20.7	8.4	5.6	4.7	3.8	5.5	6.5	6.9	2.0		
NNE	.2	.4	1.9	1.4	.4	.0	43	4.4	21.0	4.2	5.6	4.3	.0	6.5	3.2	3.7	2.8		
NE	.1	1.0	2.5	1.3	.2	.0	50	5.1	17.5	5.0	5.6	6.2	3.8	4.0	3.2	5.0	8.3		
ENE	.0	1.2	2.6	1.0	.7	.2	56	5.7	20.3	3.4	22.2	5.2	7.7	5.5	12.9	5.5	11.1		
E	.4	1.7	1.9	1.4	.9	.3	66	6.8	20.0	5.5	.0	8.1	15.4	8.0	6.5	5.5	5.6		
ESE	.1	.6	2.1	1.0	.5	.0	43	4.4	19.3	3.8	5.6	5.2	3.8	5.5	9.7	2.3	5.6		
SE	.1	.9	4.3	1.1	.4	.0	67	6.9	18.2	5.0	.0	6.2	7.7	6.5	3.2	9.2	16.7		
SSE	.0	1.5	2.8	1.0	.4	.0	56	5.7	17.3	4.6	22.2	6.6	7.7	5.5	.0	6.0	2.8		
S	.3	1.1	3.7	1.7	.9	.1	77	7.9	19.8	6.4	.0	5.7	11.5	6.0	16.1	9.6	11.1		
SSW	.0	1.5	1.5	1.4	.5	.0	49	5.0	18.5	6.7	.0	5.2	.0	3.5	3.2	6.0	2.8		
SW	.1	2.9	3.8	1.6	.8	.1	91	9.3	17.5	11.3	5.6	7.6	3.8	12.1	3.2	9.6	.0		
WSW	.2	1.7	1.4	1.3	.6	.1	58	5.9	18.6	6.7	5.6	6.6	3.8	5.5	3.2	6.4	.0		
W	.1	2.5	4.2	2.9	1.0	.0	104	10.6	19.2	8.4	.0	13.7	7.7	13.6	9.7	8.7	11.1		
WNW	.0	.9	1.8	1.6	.6	.0	49	5.0	21.1	5.0	16.7	6.2	3.8	3.0	6.5	5.0	2.8		
NW	.0	2.2	3.1	1.4	.6	.0	52	5.3	21.6	5.9	.0	4.7	7.7	2.5	6.5	6.4	13.9		
NNW	.1	2.5	1.0	1.1	.3	.2	51	5.2	17.5	6.7	5.6	3.8	11.5	6.0	6.5	3.7	2.8		
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0		
CALM	.4	219	397	232	96	11	4	.4	.0	.8	.0	.0	.0	.5	.0	.5	.0		
TOT OBS	22	22.4	40.6	23.7	9.8	1.1	977	100.0	19.1	238	18	211	26	199	31	218	36		
TOT PCT	2.3	22.4	40.6	23.7	9.8	1.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)											
	0-6	7-16	17-27	28-40	41+				00	03	06	09	12	15	18	21				
N	.7	3.5	3.4	2.7	.4	104	10.6	20.8	12.6	11.1	9.0	3.8	12.1	9.7	10.6	5.6				
NE	.7	4.5	3.7	1.4	.5	106	10.8	19.0	8.4	27.8	11.4	11.5	9.5	16.1	10.6	19.4				
E	1.6	3.2	3.9	1.9	.5	109	11.2	19.7	9.2	5.6	13.3	19.2	13.6	16.1	7.8	11.1				
SE	.8	5.8	3.9	1.8	.2	123	12.6	17.8	9.7	22.2	12.8	15.4	12.1	3.2	15.1	19.4				
S	1.1	5.0	3.8	2.5	.5	126	12.9	19.4	15.1	.0	10.9	11.5	9.5	19.4	15.6	13.9				
SW	2.6	5.7	4.3	2.0	.6	149	15.3	17.9	18.1	11.1	14.2	7.7	17.6	6.5	16.1	.0				
W	.8	6.0	4.9	3.8	.1	153	15.7	19.8	13.4	16.7	19.9	11.5	16.6	16.1	13.8	13.9				
NW	.8	4.0	3.2	2.3	.3	103	10.5	19.6	12.6	5.6	8.5	19.2	8.5	12.9	10.1	16.7				
VAR	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0				
CALM	.4					4	.4	.0	.8	.0	.0	.0	.5	.0	.5	.0				
TOT OBS	94	369	303	180	31	977		19.1	238	18	211	26	199	31	218	36				
TOT PCT	9.6	37.8	31.0	18.4	3.2		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0				

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	1-3	4-10	11-21	WIND SPEED (KNOTS)			PCT FREQ	TOTAL OBS
				22-33	34-47	48+		
0000	1.6	21.1	40.6	22.3	11.7	2.0	.8	19.7 100.0 256
0600	2.1	21.9	41.4	25.3	8.9	.4	.0	18.8 100.0 237
1200	1.3	26.1	38.7	22.6	10.0	.9	.4	18.9 100.0 230
1800	2.4	20.9	41.7	24.8	8.7	1.2	.4	19.0 100.0 254
TOT	18	219	397	232	96	11	4	19.1 977
PCT	1.8	22.4	40.6	23.7	9.8	1.1	.4	100.0

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBS	TOTAL OBS	MEAN CLOUD COVER
N	1.4	1.0	1.7	2.5	47	5.4
NNE	.1	.4	1.4	2.8	34	7.1
NE	.4	.7	1.0	3.1	37	6.5
ENE	.6	.1	1.1	2.7	32	6.6
E	.8	.7	.1	5.1	48	6.6
ESE	.7	.3	1.1	1.7	27	5.9
SE	.4	.1	3.0	2.8	45	6.8
SSE	.1	.3	1.1	3.2	35	7.0
S	.4	1.0	1.6	3.5	46	6.5
SSW	.7	.1	2.3	2.4	39	6.2
SW	1.4	1.6	3.0	3.5	67	5.6
WSW	.8	1.4	2.5	1.7	46	5.5
W	2.3	2.7	5.4	1.7	85	5.0
WNW	.6	.4	3.4	1.0	41	5.9
NW	.4	.3	2.0	2.3	35	6.3
NNW	.8	1.0	2.0	1.8	40	5.5
VAR	.0	.0	.0	.0	0	.0
CALM	.1	.0	.3	.1	4	4.8
TOT OBS	87	86	237	298	708	6.0
TOT PCT	12.3	12.1	33.5	42.1	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	000	149	150	299	300	599	600	999	1000	2000	3499	4999	5000	6499	7999	5000 8000+ ANY HGT	NH <5/8 TOTAL	OBS
N	.3	.6	.1	.3	.4	1.3	.6	.7	.6	.7	.6	.1	.0	.0	.0	.1	2.5	47
NNE	.6	.4	.3	.6	.3	.4	1.1	.4	1.1	.4	.1	.0	.0	.0	.0	.0	1.3	34
NE	.4	.4	.0	.3	.3	.4	1.6	.7	1.6	.7	.4	.0	.0	.0	.0	.0	1.4	37
ENE	.4	.4	.1	.3	.3	.7	1.6	.6	1.6	.6	.0	.0	.0	.0	.0	.0	.8	32
E	1.0	.6	.6	1.0	1.0	1.0	1.1	.0	1.1	.0	.1	.1	.0	.0	.0	.0	2.0	48
ESE	.1	.1	.0	.4	.3	.3	.6	.8	.6	.8	.4	.0	.0	.0	.0	.0	1.1	27
SE	.7	.1	.0	.4	1.0	.7	.8	.4	2.1	.8	.1	.1	.3	.0	.0	.0	.8	45
SSE	.8	.7	.0	.8	.8	.7	.8	.4	.7	.8	.4	.0	.0	.0	.0	.0	.8	35
S	.7	.7	.1	.7	.7	.7	1.7	.4	1.7	.4	.4	.0	.1	.0	.0	.3	1.7	46
SSW	.3	.3	.0	.3	.3	.3	2.3	.4	2.3	.4	.4	.0	.0	.0	.0	.1	1.1	39
SW	.7	.7	.1	.3	.4	.8	2.4	.6	2.4	.6	.3	.1	.3	.0	.0	.0	4.0	67
WSW	.1	.1	.0	.0	.0	.3	2.7	.6	2.7	.6	.3	.1	.0	.0	.0	.0	2.4	46
W	.1	.1	.3	.3	.1	.8	3.2	.7	3.2	.7	.8	.1	.1	.0	.0	.0	5.6	85
WNW	.3	.3	.0	.1	.1	.1	1.8	1.6	1.8	1.6	.3	.0	.0	.0	.0	.0	1.6	41
NW	.1	.1	.0	.1	.1	.8	1.3	1.1	1.3	1.1	.0	.0	.0	.0	.0	.3	1.1	35
NNW	.4	.4	.3	.0	.0	.6	.3	.0	.3	1.3	.0	.0	.0	.0	.0	.0	2.3	40
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOT OBS	52	52	14	43	73	178	81	.3	178	81	.3	.0	.0	.0	.0	.0	.1	4
TOT PCT	7.3	7.3	2.0	6.1	10.3	25.1	11.4	.4	25.1	11.4	.4	.7	.6	.8	.6	.8	21.8	708
												4.7					30.8	100.0

PERIOD: (PRIMARY) 1953-1970  
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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)									
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0		
= OR >6500	.6	1.1	1.1	1.1	1.1	1.1	1.4	1.4		
= OR >5000	.8	2.0	2.0	2.0	2.0	2.0	2.3	2.3		
= OR >3500	4.2	6.4	6.5	6.5	6.5	6.5	6.9	6.9		
= OR >2000	9.7	16.7	17.9	18.1	18.1	18.1	18.5	18.5		
= OR >1000	23.4	38.6	41.8	42.9	43.1	43.1	43.5	43.5		
= OR >600	27.5	46.0	50.8	52.7	53.2	53.4	53.8	53.8		
= OR >300	28.5	50.1	56.6	58.6	59.2	59.3	59.9	59.9		
= OR >150	28.8	51.8	58.5	60.6	61.2	61.3	61.9	61.9		
= OR > 0	29.1	53.0	61.4	64.8	66.8	67.4	69.2	69.2		
TOTAL	206	375	435	459	473	477	490	490		

TOTAL NUMBER OF OBS: 708 PCT FREQ NH <5/8: 30.8

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

										TOTAL OBS
0	1	2	3	4	5	6	7	8	DBSCD	
4.5	3.4	6.9	8.5	7.5	6.1	15.6	12.3	29.3	6.0	
									738	



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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.0	.1	.0	.0	.3	.0	.0	.0	.4	.0	.3	.1	.1	.0	.0	.3	.0	.0	12	1.5
NO PCP	.0	.0	.0	.0	.4	.0	.1	.3	.3	.0	.3	.4	.0	.0	.0	.0	.0	.0	13	1.6
TOTAL	0	1	0	0	5	0	1	2	5	0	4	4	1	0	0	2	0	0	25	3.1
PCP	.1	.1	.0	.0	.3	.0	.3	.1	.1	.1	.0	.0	.1	.1	.0	.0	.0	.1	12	1.5
NO PCP	.0	.0	.0	.1	.1	.0	.1	.1	.1	.1	.5	.1	.0	.0	.0	.0	.0	.0	11	1.4
TOTAL	1	1	0	1	3	0	3	2	2	2	4	1	1	1	0	0	0	1	23	2.9
PCP	.0	.0	.4	.1	.5	.3	.0	.3	.4	.0	.3	.0	.1	.0	.4	.1	.0	.0	22	2.8
NO PCP	.1	.3	.0	.1	.0	.0	.3	.0	.4	.1	.4	.0	.1	.1	.4	.1	.0	.0	19	2.4
TOTAL	1	2	3	2	4	2	2	2	6	1	5	0	2	1	6	2	0	0	41	5.2
PCP	.1	.1	.4	1.0	1.1	.5	.3	.6	.6	.4	.3	.1	.6	.3	.1	.1	.0	.0	53	6.7
NO PCP	.1	.5	.9	.1	.5	.1	.0	.4	.9	.4	.9	.1	.1	.3	.1	.1	.0	.0	44	5.5
TOTAL	2	5	10	9	13	5	2	8	12	6	9	2	6	4	2	2	0	0	97	12.2
PCP	.0	.3	.4	.9	.4	.4	.4	1.4	.5	.3	.5	.0	.5	.4	.6	.4	.0	.0	57	7.2
NO PCP	1.1	1.0	1.6	.8	1.6	1.6	2.5	1.4	1.4	1.8	2.1	1.1	2.0	1.8	1.4	1.1	.0	.0	194	24.4
TOTAL	9	10	16	13	16	16	23	22	15	16	21	9	20	17	16	12	0	0	251	31.5
PCP	.1	.0	.4	.1	.1	.1	.1	.0	.1	.3	.0	.0	.1	.1	.1	.3	.0	.0	16	2.0
NO PCP	5.0	2.4	1.6	2.3	1.9	.6	1.9	1.6	2.6	1.0	4.8	3.8	7.2	2.1	1.8	2.1	.0	.4	343	43.1
TOTAL	41	19	16	19	16	6	16	13	22	10	38	30	58	18	15	19	0	3	359	45.1
TOTAL PCT	54	38	45	44	57	29	47	49	62	35	81	46	88	41	39	37	0	4	796	100.0
	6.8	4.8	5.7	5.5	7.2	3.6	5.9	6.2	7.8	4.4	10.2	5.8	11.1	5.2	4.9	4.6	.0	.5	100.0	

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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	2	.2
	4-10	.0	.0	.0	.0	.2	.0	.0	.1	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	5	.5
	11-21	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.4	.1	.0	.0	.0	.1	.0	.0	12	1.2
	22+	.0	.1	.0	.0	.0	.0	.1	.0	.2	.0	.0	.0	.1	.0	.0	.1	.0	.0	6	.6
	TOTAL	0	1	0	0	5	0	1	2	5	0	4	4	1	0	0	2	0	0	25	2.6
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	1	.1
	4-10	.0	.0	.0	.0	.2	.0	.1	.1	.1	.2	.2	.0	.0	.0	.0	.0	.0	.0	9	.9
	11-21	.0	.1	.0	.0	.1	.0	.1	.1	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	6	.6
	22+	.1	.0	.0	.1	.0	.0	.1	.0	.0	.0	.1	.1	.1	.1	.0	.0	.0	.0	7	.7
	TOTAL	1	1	0	1	3	0	3	2	2	2	4	1	1	1	0	0	0	1	23	2.4
1<2	0-3	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1	.1
	4-10	.0	.0	.0	.1	.0	.0	.1	.1	.1	.0	.2	.0	.0	.0	.0	.1	.0	.0	7	.7
	11-21	.1	.1	.1	.1	.1	.1	.1	.4	.1	.1	.4	.0	.0	.0	.3	.0	.0	.0	20	2.1
	22+	.0	.0	.2	.0	.3	.1	.1	.2	.0	.0	.0	.0	.2	.1	.4	.1	.0	.0	17	1.7
	TOTAL	1	2	3	2	4	2	3	7	2	1	6	0	2	1	7	2	0	0	42	4.6
2<3	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	4-10	.1	.0	.2	.2	.4	.2	.0	.2	.3	.0	.3	.1	.2	.0	.1	.0	.0	.0	23	2.4
	11-21	.1	.4	.5	.4	1.0	.4	.4	.2	.8	.6	.2	.0	.3	.3	.0	.1	.0	.0	39	4.0
	22+	.0	.1	.3	.4	1.0	.4	.0	.2	.8	.6	.2	.2	.1	.3	.1	.1	.0	.0	48	4.9
	TOTAL	2	5	10	10	16	7	4	8	13	7	9	3	6	6	2	2	0	0	110	11.3
5<10	0-3	.0	.1	.1	.0	.0	.0	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	4	.4
	4-10	.2	.0	.3	.2	.2	.2	.2	.2	.2	.6	.6	.3	.8	.2	.1	.4	.0	.0	47	4.8
	11-21	.2	.4	.9	.8	.6	.6	1.7	1.1	1.2	.7	.8	.3	.6	.9	.8	.3	.0	.0	121	12.4
	22+	.7	.8	.6	1.3	.9	.8	.8	.9	.8	.5	1.0	.6	1.1	.6	1.0	.6	.0	.0	130	13.4
	TOTAL	11	13	19	23	17	18	28	22	23	18	24	12	25	17	19	13	0	0	302	31.0
10+	0-3	.1	.0	.0	.0	.3	.1	.0	.0	.2	.0	.1	.1	.1	.0	.0	.1	.0	.3	14	1.4
	4-10	1.3	.4	.4	.7	.7	.2	.5	.8	.4	.7	1.5	1.1	1.4	.7	.0	2.0	.0	.0	127	13.1
	11-21	1.5	.9	.9	1.2	.7	1.1	2.0	.9	1.4	.6	1.5	1.0	3.3	.6	1.7	.5	.0	.0	196	20.1
	22+	1.7	.8	.4	.1	.4	.2	.4	.3	.7	.8	1.2	1.6	2.3	1.1	.5	.7	.0	.0	131	13.5
	TOTAL	46	21	17	20	21	16	28	20	27	21	43	38	69	24	22	32	0	3	468	48.1
	TOTAL	61	43	49	56	66	43	67	56	77	49	90	58	104	49	50	51	0	4	973	100.0
	PCT	6.3	4.4	5.0	5.8	6.8	4.4	6.9	5.8	7.9	5.0	9.2	6.0	10.7	5.0	5.1	5.2	.0	.4	100.0	

FEBRUARY

PERIOD: (PRIMARY) 1953-1970  
(OVER-ALL) 1904-1970

AREA 0007 UNIMAK  
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8), AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	6.1	2.5	5.1	13.1	28.8	11.6	5.1	1.5	.0	.0	73.7	26.3	198
06009	9.0	1.8	5.4	8.4	22.3	9.6	3.6	.6	1.2	.6	62.7	37.3	166
12015	8.3	1.7	5.6	9.4	15.6	8.3	5.0	1.1	.6	.6	56.1	43.9	180
18021	6.3	1.7	8.0	9.1	32.0	16.0	4.6	.0	.6	2.3	80.6	19.4	175
TOT	53	14	43	73	178	82	33	6	4	6	492	227	719
PCT	7.4	1.9	6.0	10.2	24.8	11.4	4.6	.8	.6	.8	68.4	31.6	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	3.1	.5	3.6	6.2	29.9	56.7	194
06009	3.7	3.1	4.3	9.9	33.3	45.7	162
12015	1.1	3.9	3.9	11.8	27.5	51.7	178
18021	2.9	1.7	2.9	9.2	32.2	51.1	174
TOT	19	16	26	65	217	365	708
PCT	2.7	2.3	3.7	9.2	30.6	51.6	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET, NH >4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00003	5.7	13.9	32.0	42.8	25.3	194
06009	9.3	18.5	32.7	34.0	33.3	162
12015	8.4	18.5	33.1	25.8	41.0	178
18021	6.3	17.8	31.0	51.1	17.8	174
TOT	52	121	228	273	207	708
PCT	7.3	17.1	32.2	38.6	29.2	100.0

FEBRUARY

PERIOD: (PRIMARY) 1953-1970  
(OVER-ALL) 1904-1970

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TABLE 13

TEMP F	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP										TOTAL OBS	PCT FREQ
	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100				
45/49	.0	.0	.0	.1	.0	.6	.0	.0			5	.7
40/44	.0	.0	.0	.0	1.8	2.8	6.4	9.9			140	20.9
35/39	.0	.0	.0	.6	1.9	6.3	16.9	30.5			376	56.2
30/34	.0	.0	.0	.0	1.9	3.7	4.5	7.0			115	17.2
25/29	.0	.0	.0	.0	.0	1.0	.9	1.3			22	3.3
20/24	.0	.0	.0	.0	.0	.0	.7	.6			9	1.3
15/19	.0	.0	.0	.0	.0	.0	.0	.3			2	.3
TOTAL	.0	.0	.0	.7	5.7	14.5	29.4	49.6			669	100.0
PCT	.0	.0	.0	.7	5.7	14.5	29.4	49.6				

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP											VAR	CALM
N	NE	E	SE	S	SW	W	NW	VAR				
.0	.1	.1	.0	.4	.0	.0	.0	.0			.0	.0
.3	.1	2.7	4.6	6.6	4.5	1.3	.7	.0			.0	.0
3.4	6.1	9.1	8.5	5.5	10.2	9.6	3.6	.0			.0	.1
3.3	3.7	1.2	.7	.3	1.0	3.6	3.0	.0			.0	.3
.6	.9	.0	.0	.0	.0	.7	1.0	.0			.0	.0
.6	.1	.0	.0	.0	.0	.1	.4	.0			.0	.0
.3	.0	.0	.0	.0	.0	.0	.0	.0			.0	.0
57	75	88	93	86	105	103	59	.0			.0	.3
8.5	11.2	13.2	13.9	12.9	15.7	15.4	8.8	.0			.0	.4

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR											TOTAL OBS
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN			
00003	47	44	42	38	27	22	18	36.7			252
06009	49	45	41	37	28	20	20	35.9			235
12015	42	41	41	37	28	21	21	35.9			227
18021	48	42	41	37	27	20	17	35.8			253
TOT	49	43	41	37	27	21	17	36.1			967

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR											TOTAL OBS
HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN				
00003	.0	1.1	3.4	16.0	32.6	46.9	87				175
06009	.0	1.2	11.9	16.1	25.6	45.2	85				168
12015	.0	.7	3.9	14.5	30.3	50.7	87				152
18021	.0	.0	3.4	11.4	29.5	55.7	88				176
TOT	0	5	38	97	198	333	87				671

PERIOD: (PRIMARY) 1953-1970  
(OVER-ALL) 1904-1970

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SFA TMP DIF	17	21	25	29	33	37	41	45	TOT	M	WD
	20	24	28	32	36	40	44	48		FOG	FOG
9/10	.0	.0	.0	.0	.0	.0	.0	.1	1	.0	.1
7/8	.0	.0	.0	.0	.0	.0	.0	.1	1	.0	.1
6	.0	.0	.0	.0	.0	.3	.0	.0	2	.0	.3
5	.0	.0	.0	.0	.0	.0	.4	.1	4	.1	.4
4	.0	.0	.0	.0	.1	.4	1.8	.0	17	.5	1.8
3	.0	.0	.0	.0	.1	1.1	1.5	.0	20	.3	2.4
2	.0	.0	.0	.0	.0	3.9	1.0	.0	36	1.4	3.5
1	.0	.0	.0	.0	.4	6.0	1.0	.0	54	.8	6.5
0	.0	.0	.0	.3	1.6	10.3	.7	.0	95	.8	12.1
-1	.0	.0	.0	.0	1.6	7.5	1.0	.0	74	.5	9.5
-2	.0	.0	.0	.0	4.5	6.7	.5	.0	86	1.0	10.7
-3	.0	.0	.0	.3	2.2	4.2	.3	.0	51	.7	6.3
-4	.0	.0	.0	.7	6.5	2.3	.7	.0	76	.5	9.8
-5	.0	.0	.1	3.0	3.7	2.3	.1	.0	68	.1	9.1
-6	.0	.0	.0	.4	3.1	.3	.0	.0	28	.3	3.5
-7/-8	.0	.0	.7	2.4	1.9	.8	.0	.0	43	.1	5.7
-9/-10	.0	.0	.7	2.4	1.4	.3	.0	.0	35	.1	4.6
-11/-13	.0	.4	1.4	.8	.0	.0	.0	.0	19	.0	2.4
-14/-16	.1	1.2	.7	.4	.0	.0	.0	.0	18	.0	2.4
-17/-19	.4	.4	.3	.0	.0	.0	.0	.0	8	.0	1.1
TOTAL	4	15	29	79	200	341	65	3	736	55	681
PCT	.5	2.0	3.9	10.7	27.2	46.3	8.8	.4	100.0	7.5	92.5



PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N					NE					TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47			
<1	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	1	.0	0
1-2	.0	.0	.6	.0	.0	.0	1.2	.3	.0	.0	2	.0	5
3-4	.0	1.5	1.2	.6	.0	.0	1.2	1.5	1.2	.0	11	.0	13
5-6	.0	.3	2.2	.6	.0	.0	.3	1.2	.6	.6	10	.0	9
7	.0	.0	2.5	.9	.3	.0	.3	.6	.6	.0	12	.0	5
8-9	.0	.6	.6	.3	.0	.0	.0	2.2	.6	.0	5	.0	9
10-11	.0	.3	.3	.3	.6	.0	.0	.0	.0	.3	5	.0	1
12	.0	.0	.0	.6	.3	.0	.0	.0	.0	.0	3	.0	0
13-16	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	2	.0	1
17-19	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	1	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	0	10	24	13	5	0	10	19	10	3	52	1	43
PCT	.0	3.1	7.4	4.0	1.5	.0	3.1	5.9	3.1	.9	16.0	.3	13.3

HGT	E					SE					TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47			
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
1-2	.0	.3	.6	.0	.0	.0	.9	1.9	.0	.0	3	.0	9
3-4	.0	.0	1.5	.3	.0	.0	.0	1.2	.6	.0	6	.0	6
5-6	.0	.0	.3	.0	.3	.0	.6	1.2	.3	.0	2	.0	7
7	.0	.3	.0	.9	.3	.0	.0	.0	.6	.3	5	.0	3
8-9	.0	.0	.0	.3	.6	.0	.3	.6	.3	.0	3	.0	4
10-11	.0	.0	.0	.3	.3	.0	.0	.0	.9	.0	2	.0	3
12	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	1	.0	1
13-16	.0	.0	.0	.0	.0	.0	.0	.3	.3	.6	1	.0	4
17-19	.0	.0	.0	.0	.0	.0	.0	.3	.0	.3	0	.0	2
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	0	2	8	6	6	0	6	18	11	4	23	0	39
PCT	.0	.6	2.5	1.9	1.9	.0	1.9	5.6	3.4	1.2	7.1	.0	12.0

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.3	1.2	.0	.0	.0	.0	5	.0	.0	.0	.0	.0	.0	0
1-2	.0	.9	.0	.0	.0	.0	3	.0	.6	.6	.0	.0	.0	4
3-4	.0	.6	.0	.0	.0	.0	3	.0	.9	1.5	.3	.0	.0	9
5-6	.0	.0	.6	.0	.3	.0	3	.0	.6	.9	.6	.0	.0	7
7	.0	.0	.6	1.5	.0	.0	7	.0	.3	1.5	.6	.0	.0	8
8-9	.0	.0	1.2	.3	.3	.0	6	.0	.0	.9	.3	.3	.0	5
10-11	.0	.0	.3	.6	.3	.0	4	.0	.0	.0	.0	.3	.0	1
12	.0	.0	.0	.6	.3	.0	3	.0	.0	.6	.6	.0	.0	4
13-16	.0	.3	.0	.0	.0	.0	2	.0	.0	.0	.0	.6	.0	2
17-19	.0	.0	.3	.0	.0	.0	1	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.3	1
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	1	10	14	10	4	0	39	0	8	20	8	4	1	41
PCT	.3	3.1	4.3	3.1	1.2	.0	12.0	.0	2.5	6.2	2.5	1.2	.3	12.7

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	GRAND TOTAL
<1	.0	.3	.0	.0	.0	.0	1	.0	.0	.0	.0	.0	.0	0	7
1-2	.0	1.9	2.2	.0	.0	.0	13	.0	1.9	.6	.0	.0	.0	8	47
3-4	.0	.3	.9	.6	.0	.0	6	.0	.3	.6	.9	.0	.0	6	62
5-6	.0	.6	.6	.6	.3	.0	7	.0	.3	.6	.9	.0	.0	6	51
7	.0	.3	.0	1.5	.9	.0	9	.0	.3	.3	.3	.0	.0	3	52
8-9	.0	.0	.9	.9	.3	.0	7	.0	.0	.0	.3	.3	.0	2	41
10-11	.0	.0	.3	.3	.6	.0	6	.0	.0	.0	.3	.0	.0	1	23
12	.0	.0	.3	.3	.0	.0	2	.0	.0	.0	.3	.0	.0	1	15
13-16	.0	.0	.0	.9	.9	.0	6	.0	.0	.0	.3	.3	.0	2	20
17-19	.0	.0	.0	.0	.3	.0	1	.0	.0	.0	.0	.0	.0	0	5
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	1
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
TOTAL	0	11	17	19	11	0	58	0	9	7	11	2	0	29	324
PCT	.0	3.4	5.2	5.9	3.4	.0	17.9	.0	2.8	2.2	3.4	.6	.0	9.0	100.0

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1970

FEBRUARY

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)							TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+		
<1	.3	1.8	.0	.0	.0	.0	.0	7
1-2	.3	7.7	6.8	.0	.0	.0	.0	48
3-4	.0	4.9	9.5	4.6	.0	.0	.0	62
5-6	.0	2.8	7.7	3.7	1.5	.0	.0	51
7	.0	1.5	5.5	7.1	1.8	.0	.0	52
8-9	.0	.9	6.5	3.4	1.8	.0	.0	41
10-11	.0	.3	.9	3.4	2.5	.0	.0	23
12	.0	.0	.9	2.8	.9	.0	.0	15
13-16	.0	.3	.6	2.2	2.5	.6	.0	20
17-19	.0	.0	.0	.0	.9	.0	.0	5
20-22	.0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.3	.0	1
33-40	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	2	66	127	88	39	3	325	
PCT	.6	20.3	39.1	27.1	12.0	.9	100.0	

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+ TOTAL	MEAN HGT
<6	.8	6.0	9.3	4.9	4.4	4.1	.8	.3	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	114
6-7	.0	.8	1.9	4.7	5.2	2.7	2.5	1.4	3.0	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	84
8-9	.0	.0	1.4	3.8	3.3	1.4	3.8	2.2	3.0	1.1	.3	.5	.0	.3	.0	.0	.0	.0	.0	77
10-11	.0	.0	.3	1.1	1.1	2.5	1.9	.8	1.4	.8	.0	.3	.3	.0	.0	.0	.0	.0	.0	38
12-13	.0	.0	.0	.8	.3	.3	.5	.8	1.1	.0	.0	.3	1.1	.0	.0	.0	.0	.0	.0	19
>13	.0	.0	.0	.0	.3	.0	.5	1.1	.3	.0	.3	.0	.5	.0	.0	.0	.0	.0	.0	11
INDET	5.5	.0	.0	.0	.0	.3	.3	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	22
TOTAL	23	25	47	56	53	41	38	24	34	10	2	.0	.0	.0	.0	.0	.0	.0	.0	365
PCT	6.3	6.8	12.9	15.3	14.5	11.2	10.4	6.6	9.3	2.7	.5	1.1	1.9	.3	.0	.0	.0	.0	.0	100.0

MARCH

PERIOD: (PRIMARY) 1953-1970  
(OVER-ALL) 1922-1970

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FOG	SMOKE	DUST	BLWG	SIG WEA	
N	.1	.0	.1	.0	1.0	.0	.1	1.2	12	.0	.3	.1	.1	.0	6.6	85
NNE	.0	.0	.1	.0	.2	.0	.0	.3	3	.0	.2	.0	.0	.0	2.1	27
NE	.4	.0	.0	.0	.4	.0	.0	.8	8	.0	.3	.1	.0	.0	2.8	41
ENE	.2	.0	.6	.0	.4	.0	.0	1.1	11	.0	.1	.0	.0	.0	2.2	35
E	1.1	.1	.3	.0	.7	.0	.0	2.0	21	.0	.4	.0	.1	.1	3.4	61
ESE	.5	.0	.3	.0	.4	.0	.0	1.2	12	.0	.5	.0	.0	.0	1.6	34
SE	.5	.0	.3	.0	.1	.0	.0	.9	9	.0	.5	.0	.0	.0	2.4	39
SSE	.5	.1	.4	.0	.3	.0	.0	1.2	12	.0	1.0	.0	.0	.0	2.1	44
S	.7	.0	1.3	.0	.3	.0	.0	2.2	23	.0	1.3	.0	.0	.0	3.8	75
SSW	.3	.1	.5	.0	.3	.0	.0	1.2	12	.0	.3	.0	.0	.0	3.5	51
SW	.7	.1	.6	.0	.1	.0	.0	1.4	14	.0	.5	.3	.0	.0	3.9	62
WSW	.4	.0	.1	.0	.2	.0	.0	.6	6	.0	.6	.0	.1	.1	5.1	66
W	.0	.2	.2	.0	.2	.0	.0	.6	6	.0	.7	.0	.1	.1	7.7	93
WNW	.1	.1	.1	.0	1.1	.0	.0	1.4	14	.0	.1	.0	.1	.1	7.0	88
NW	.0	.0	.0	.1	.4	.1	.0	.6	6	.0	.1	.0	.1	.1	8.2	93
NNW	.0	.1	.0	.0	.9	.1	.1	1.1	11	.0	.0	.0	.1	.1	7.4	88
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
CALM	.1	.0	.0	.0	.0	.0	.0	.1	1	.0	.8	.1	.0	.0	3.9	50
TOT OBS	56	8	49	1	70	2	2	17.5	181	0	77	6	7	7	761	1032
TOT PCT	5.4	.8	4.7	.1	6.8	.2	.2	17.5	181	.0	7.5	.6	.7	.7	73.7	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FOG	SMOKE	DUST	BLWG	SIG WEA	
0003	4.8	.0	4.1	.0	7.6	.3	.3	16.6	48	.0	8.3	.7	.3	.3	74.1	290
0609	6.9	1.2	2.7	.0	5.0	.4	.0	15.1	39	.0	8.1	1.2	.4	.4	75.3	259
12015	4.5	.8	6.6	.0	7.0	.0	.4	19.7	48	.0	8.5	.4	.8	.8	70.5	247
18021	4.9	1.1	5.6	.0	6.8	.0	.0	17.7	47	.0	8.3	.0	1.1	1.1	72.9	266
TOT	56	8	50	1	70	2	2	17.2	182	.0	88	6	7	7	776	1059
PCT	5.3	.8	4.7	.1	6.6	.2	.2	17.2	182	.0	8.3	.6	.7	.7	73.3	100.0

MARCH

PERIOD: (PRIMARY) 1953-1970  
(OVER-ALL) 1922-1970

AREA 0007 UNIMAK  
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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)					
	0-3	4-10	11-21	22-33	34-47	48+	TOTAL OBS	PCT FREQ	MEAN SPD		00	03	06	09	12	15
N	.0	1.9	3.6	1.9	.6	.1	101	8.2	19.4		9.7	.0	8.4	5.3	7.8	6.5
NNE	.0	1.1	1.1	.6	.1	.0	36	2.9	15.5		3.0	.0	2.2	10.5	2.9	9.7
NE	.0	1.2	1.5	.9	.3	.0	49	4.0	18.1		3.3	.0	4.2	2.6	5.3	.0
ENE	.1	1.5	1.4	.4	.1	.0	42	3.4	14.6		3.3	4.0	2.9	5.3	3.3	3.2
E	.0	1.3	2.5	1.1	.2	.0	64	5.2	17.6		6.7	.0	5.1	2.6	4.1	6.5
ESE	.0	1.0	1.7	.2	.3	.1	40	3.2	16.5		3.3	4.0	2.9	7.9	2.9	.0
SE	.0	.6	1.9	.7	.2	.0	42	3.4	17.2		3.0	.0	2.9	2.6	4.1	9.7
SSE	.0	1.5	1.9	.5	.1	.0	50	4.0	14.2		3.0	.0	2.9	10.5	3.3	9.7
S	.2	1.6	2.9	1.4	1.0	.0	88	7.1	19.1		5.7	4.0	6.5	7.9	7.0	16.1
SSW	.2	1.4	1.9	1.0	.2	.0	58	4.7	16.2		5.7	.0	4.4	2.6	5.8	.0
SW	.2	1.8	3.5	1.0	.2	.0	82	6.6	16.0		5.7	8.0	7.3	13.2	5.8	12.9
WSW	.1	1.5	3.6	1.0	.3	.2	84	6.8	18.3		8.0	4.0	4.0	7.9	5.8	12.9
W	.2	3.6	3.7	1.9	.6	.0	123	9.9	15.9		9.0	20.0	12.0	5.3	10.3	.0
WNW	.2	1.1	4.4	2.1	.6	.0	104	8.4	18.8		8.0	24.0	8.7	7.9	9.9	3.2
NW	.1	1.2	4.0	3.0	1.1	.0	117	9.4	21.1		10.4	4.0	9.8	2.6	11.5	3.2
NNW	.1	1.0	3.6	3.0	.8	.2	107	8.6	22.2		8.0	28.0	11.3	5.3	5.3	6.5
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0		.0	.0	.0	.0	.0	.0
CALM	4.2	287	538	255	86	7	52	4.2	17.3		4.0	.0	4.7	.0	4.9	.0
TOT OBS	66	23.2	43.4	20.6	6.9	.6	1239	100.0			299	25	275	38	243	31
TOT PCT	5.3										100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)					
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD			00	03	06	09	12	15
N	.6	4.8	3.6	1.9	.1	137	11.1	18.4			12.7	.0	10.5	15.8	10.7	16.1
NE	.6	3.6	2.3	.9	.0	91	7.3	16.5			6.7	4.0	6.9	7.9	8.6	3.2
E	.7	3.8	2.7	1.0	.2	104	8.4	17.2			10.0	4.0	8.0	10.5	7.0	6.5
SE	.3	4.8	1.9	.4	.1	92	7.4	15.5			6.0	.0	5.8	13.2	7.4	19.4
S	1.2	5.1	3.2	2.2	.1	146	11.8	17.9			11.4	4.0	10.9	10.5	12.8	16.1
SW	1.2	5.5	5.3	.9	.5	166	13.4	17.2			13.7	12.0	11.3	21.1	11.5	25.8
W	2.0	8.2	5.5	2.4	.2	227	18.3	17.2			17.1	44.0	20.7	13.2	20.2	3.2
NW	1.0	5.2	6.9	4.4	.6	224	18.1	21.6			18.4	32.0	21.1	7.9	16.9	9.7
VAR	.0	.0	.0	.0	.0	0	.0	.0			.0	.0	.0	.0	.0	.0
CALM	4.2	507	388	174	22	52	4.2	.0			4.0	.0	4.7	.0	4.9	.0
TOT OBS	148	40.9	31.3	14.0	1.8	1239	100.0				299	25	275	38	243	31
TOT PCT	11.9										100.0	100.0	100.0	100.0	100.0	100.0

PERIOD: (PRIMARY) 1953-1970  
(OVER-ALL) 1922-1970

MARCH

AREA 0007 UNIMAK  
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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	1-3	4-10	11-21	WIND SPEED (KNOTS)	48+	CALM	MEAN	PCT FREQ	TOTAL OBS
				22-33	34-47				
00003	.3	21.6	45.4	21.9	6.2	.9	3.7	18.0	100.0
06009	1.6	26.5	40.3	20.8	6.7	.0	4.2	16.7	100.0
12015	1.5	21.9	45.3	19.0	7.3	.7	4.4	17.2	100.0
18021	1.2	22.6	43.0	20.4	7.6	.6	4.6	17.3	100.0
TOT	14	287	538	255	86	7	52	17.3	1239
PCT	1.1	23.2	43.4	20.6	6.9	.6	4.2	100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 &	Obscd	TOTAL OBS	MEAN CLOUD COVER
N	2.0	1.7	2.9	2.2		79	4.8
NNE	.7	.3	.9	1.2		28	5.4
NE	.9	.3	.7	1.8		33	5.7
ENE	.2	.1	.1	3.2		33	7.5
E	1.0	.3	.2	3.8		48	6.3
ESE	.1	.2	.7	2.0		27	7.0
SE	.2	.0	.6	1.8		23	7.0
SSE	.3	.0	.6	2.8		33	7.1
S	.8	.0	.9	4.7		57	6.9
SSW	.2	.2	.7	3.2		39	7.2
SW	.3	.4	1.2	2.8		43	6.7
WSW	.6	1.4	1.6	2.9		58	6.0
W	1.9	1.6	4.8	2.3		95	5.1
WNW	2.0	1.3	3.3	1.9		77	5.0
NW	2.8	1.8	3.3	2.0		89	4.6
NNW	2.0	1.6	4.9	1.8		92	5.0
VAR	.0	.0	.0	.0		0	.0
CALM	2.8	.4	.9	1.0		46	3.0
TOT OBS	169	106	253	372		900	5.6
TOT PCT	18.8	11.8	28.1	41.3		100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	0-2	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8	TOTAL
		599	999	1999	3499	4999	6499	7999		ANY HGT	OBS
N	1.1	.1	.6	1.6	1.4	.3	.0	.0	.0	4.7	79
NNE	.0	.0	.6	.8	.2	.0	.0	.0	.0	1.6	28
NE	.2	.0	.6	.6	.6	.0	.0	.0	.0	1.6	33
ENE	.4	.2	.7	1.1	.6	.2	.0	.0	.0	.4	33
E	.4	.4	1.1	1.2	.4	.0	.0	.0	.0	1.6	48
ESE	.3	.0	.6	.7	.7	.0	.0	.0	.0	.7	27
SE	.4	.1	.2	.4	.6	.0	.0	.0	.0	.6	23
SSE	.4	.1	.6	1.2	.3	.1	.0	.0	.0	.6	33
S	1.3	.1	1.2	1.3	.7	.0	.0	.0	.1	1.0	57
SSW	.1	.3	.9	1.3	.6	.2	.0	.0	.0	.9	39
SW	.4	.1	.7	1.7	.4	.1	.1	.1	.0	1.1	43
WSW	.3	.0	.4	2.2	.3	.1	.1	.1	.1	2.7	58
W	.7	.1	1.3	2.2	.7	.6	.0	.0	.1	4.9	95
WNW	.0	.1	.8	2.0	1.2	.3	.0	.0	.0	4.0	77
NW	.0	.2	.4	1.9	1.2	.2	.0	.0	.0	5.9	89
NNW	.1	.2	.9	2.3	1.4	.0	.1	.0	.1	4.9	92
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.2	.1	.2	.4	.4	.0	.0	.0	.1	3.6	46
TOT OBS	51	27	105	207	106	20	3	3	5	364	900
TOT PCT	5.7	3.0	11.7	23.0	11.8	2.2	.3	.3	.6	40.4	100.0



PERIOD: (PRIMARY) 1953-1970  
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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	.7	.9	.9	.9	.9	.9	.9	.9
= OR >5000	1.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3
= OR >3500	2.5	3.6	3.6	3.6	3.6	3.6	3.6	3.6
= OR >2000	9.4	14.5	15.5	15.6	15.6	15.6	15.6	15.6
= OR >1000	20.3	33.0	36.6	37.7	38.0	38.4	38.4	38.4
= OR >600	24.6	40.7	46.9	48.6	49.3	49.6	49.8	49.8
= OR >300	24.9	42.1	48.9	50.8	51.9	52.3	52.7	52.7
= OR >150	25.1	42.6	49.5	51.6	52.9	53.3	53.8	53.8
= OR > 0	25.1	43.5	51.3	54.5	56.4	58.5	59.9	59.9
TOTAL	230	398	469	499	516	535	548	548

TOTAL NUMBER OF OBS: 915 PCT FREQ NH <5/8: 40.1

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

TOTAL							
OBS							
0	1	2	3	4	5	6	7
12.6	5.1	8.0	7.1	6.6	6.4	9.4	9.0
						29.4	6.3
							963

PERIOD: (PRIMARY) 1953-1970  
(OVER-ALL) 1922-1970

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.1	.0	.0	.1	.0	.0	.0	.1	.1	.2	.0	.0	.1	.2	.1	.2	.0	.0	12	1.2
ND PCP	.1	.2	.1	.0	.3	.0	.2	.3	.9	.1	.2	.1	.4	.0	.0	.0	.0	.6	35	3.4
TOTAL	2	2	1	1	3	0	2	4	10	3	2	1	5	2	1	2	0	6	47	4.6
PCP	.0	.0	.0	.0	.0	.3	.2	.2	.1	.2	.0	.0	.0	.0	.0	.3	.0	.0	13	1.3
ND PCP	.0	.0	.1	.1	.0	.1	.1	.1	.2	.0	.1	.0	.1	.0	.0	.2	.0	.0	11	1.1
TOTAL	0	0	1	1	0	4	3	3	3	2	1	0	1	0	0	5	0	0	24	2.3
PCP	.1	.2	.2	.2	.2	.0	.1	.3	.4	.1	.1	.1	.1	.2	.0	.4	.0	.1	28	2.7
ND PCP	.0	.0	.0	.1	.2	.1	.3	.2	.4	.3	.3	.1	.1	.0	.1	.2	.0	.0	24	2.3
TOTAL	1	2	2	3	4	1	4	5	8	4	4	2	2	2	1	6	0	1	52	5.1
PCP	.5	.0	.3	.5	1.2	.2	.2	.1	.7	.3	.5	.1	.1	.1	.1	.3	.0	.0	52	5.1
ND PCP	.6	.0	.3	.1	.3	.4	.4	.4	.6	.3	.7	.4	.2	.1	.3	.4	.0	.2	53	5.2
TOTAL	11	0	6	6	15	6	6	5	9	6	12	5	3	2	4	7	0	2	105	10.2
PCP	.4	.0	.2	.2	.5	.6	.3	.4	1.0	.3	.8	.4	.1	.5	.3	.1	.0	.0	61	5.9
ND PCP	1.2	.5	1.3	.5	1.0	.8	.9	.9	1.3	1.3	1.7	1.7	2.0	1.6	1.7	1.4	.0	.9	210	20.4
TOTAL	16	5	15	7	15	14	12	13	23	16	25	22	22	21	21	15	0	9	271	26.3
PCP	.0	.1	.1	.0	.2	.1	.1	.1	.0	.1	.0	.1	.2	.4	.2	.1	.0	.0	18	1.7
ND PCP	5.2	1.7	1.4	1.5	2.0	.8	1.1	1.1	2.1	1.8	1.7	3.5	5.6	5.5	6.3	5.3	.0	3.1	512	49.8
TOTAL	54	18	15	15	23	9	12	12	22	20	17	37	60	61	67	56	0	32	530	51.5
TOTAL PCT	84	27	40	33	60	34	39	42	75	51	61	67	93	88	94	91	0	50	1029	100.0
	8.2	2.6	3.9	3.2	5.8	3.3	3.8	4.1	7.3	5.0	5.9	6.5	9.0	8.6	9.1	8.8	.0	4.9	100.0	

PERIOD: (PRIMARY) 1953-1970  
(OVER-ALL) 1922-1970

MARCH

TABLE 9  
AREA 0007 UNIMAK  
53N-COAST 157-165W

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.5	7	.6
	4-10	.1	.0	.0	.0	.1	.0	.0	.2	.1	.0	.1	.0	.2	.0	.0	.0	.0		9	.7
	11-21	.0	.0	.1	.0	.1	.0	.2	.0	.5	.2	.1	.1	.1	.0	.0	.0	.0		17	1.4
	22+	.2	.2	.0	.1	.0	.0	.0	.0	.2	.1	.0	.0	.2	.2	.2	.2	.0		16	1.3
	TOTAL	3	2	1	1	3	0	2	4	10	3	2	1	5	2	2	2	0	6	49	4.0
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	4-10	.0	.0	.0	.1	.0	.1	.0	.1	.1	.1	.0	.0	.1	.0	.0	.0	.0	.0	5	.4
	11-21	.0	.0	.0	.0	.0	.2	.2	.2	.1	.1	.0	.0	.1	.0	.0	.1	.0		11	.9
	22+	.0	.0	.1	.0	.0	.1	.0	.3	.1	.0	.1	.0	.0	.0	.2	.3	.0	0	10	.8
	TOTAL	0	0	1	1	0	4	3	3	3	2	1	0	1	0	2	5	0	0	26	2.1
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	1	.1
	4-10	.0	.1	.0	.0	.0	.0	.0	.2	.2	.0	.2	.0	.2	.0	.0	.0	.0		10	.8
	11-21	.1	.1	.0	.2	.2	.1	.2	.1	.3	.3	.2	.1	.1	.1	.0	.1	.0		25	2.0
	22+	.0	.1	.2	.1	.2	.0	.1	.2	.2	.0	.4	.1	.0	.1	.1	.4	.0	1	20	1.6
	TOTAL	1	3	2	3	5	1	4	5	9	4	4	2	3	2	1	6	0	1	56	4.6
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	.2	4	.3
	4-10	.3	.0	.2	.1	.2	.1	.1	.1	.4	.2	.4	.1	.2	.2	.1	.2	.0		29	2.4
	11-21	.3	.0	.1	.2	.8	.3	.2	.2	.3	.2	.6	.2	.1	.1	.3	.2	.0		47	3.8
	22+	.3	.0	.2	.2	.2	.1	.3	.2	.3	.2	.2	.2	.1	.0	.3	.2	.0	2	40	3.3
	TOTAL	12	0	6	7	15	6	7	6	10	7	15	6	5	3	6	7	0	2	120	9.8
5<10	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.0	.0	.1	.0	.1	.0	.8	14	1.1
	4-10	.2	.2	.1	.2	.1	.6	.2	.3	.5	.3	.4	.4	.6	.2	.2	.2	.0		55	4.5
	11-21	.7	.3	.7	.4	.7	.5	.7	.7	.8	.5	1.5	1.4	1.1	.8	.8	.5	.0		144	11.7
	22+	.7	.0	.7	.0	.7	.2	.2	.2	1.5	.7	.4	.7	1.0	1.1	1.0	.6	.0	10	118	9.6
	TOTAL	18	7	17	7	15	16	13	15	34	20	30	30	32	27	24	16	0	10	331	26.9
10+	0-3	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.1	.1	.2	.1	.1	.0	.0	2.7	40	3.3
	4-10	1.4	.8	1.0	1.1	.7	.2	.3	.7	.7	.8	.7	1.0	2.4	.8	1.0	.7	.0		175	14.2
	11-21	2.5	.7	.7	.5	1.1	.7	.5	.6	.8	.7	1.1	2.0	3.5	3.5	3.2	2.8	.0		291	23.7
	22+	1.5	.4	.0	.1	.2	.2	.2	.0	.2	.2	.5	.7	1.3	1.3	2.4	2.3	.0		141	11.5
	TOTAL	66	24	20	21	25	13	13	15	22	22	29	45	77	70	81	71	0	33	647	52.6
	TOTAL PCT	100	36	47	40	63	40	42	48	88	58	81	84	123	104	116	107	0	52	1229	100.0
		8.1	2.9	3.8	3.3	5.1	3.3	3.4	3.9	7.2	4.7	6.6	6.8	10.0	8.5	9.4	8.7	.0	4.2	100.0	

MARCH

PERIOD: (PRIMARY) 1953-1970  
(OVER-ALL) 1922-1970

AREA 000/ UNIMAK  
53N-COAST 157-165W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH > 4/8), AND  
OCCURRENCE OF NH < 5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH < 5/8 ANY HGT	TOTAL OBS
00003	5.1	1.8	1.8	12.8	18.2	14.6	3.3	1.1	.4	.0	59.1	40.9	274
06009	7.2	.8	3.0	10.2	22.9	11.0	1.3	.0	.4	.8	57.6	42.4	236
12015	8.5	.5	3.5	9.0	23.6	8.0	2.5	.5	.5	.5	57.3	42.7	199
18021	6.6	.9	3.5	12.3	25.1	12.8	1.8	.0	.0	.9	63.9	36.1	227
TOT	63	10	27	105	208	111	21	4	3	5	557	379	936
PCT	6.7	1.1	2.9	11.2	22.2	11.9	2.2	.4	.3	.5	59.5	40.5	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	< 1/2	1/2 < 1	1 < 2	2 < 5	5 < 10	10+	TOTAL OBS
00003	3.7	1.9	3.3	7.8	21.9	61.5	270
06009	5.6	2.6	3.9	8.2	21.2	58.4	231
12015	3.6	2.6	2.6	8.8	32.1	50.3	193
18021	5.0	1.8	4.1	10.0	24.4	54.8	221
TOT	41	20	32	79	224	519	915
PCT	4.5	2.2	3.5	8.6	24.5	56.7	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET, NH > 4/8), BY HOUR

HOUR (GMT)	< 150 < 5000	< 600 < 1	< 1000 < 5	1000+ AND 5+	NH < 5/8 AND 5+	TOTAL OBS
00003	4.8	10.7	28.9	32.2	38.9	270
06009	7.4	13.9	29.9	31.2	39.0	231
12015	6.7	13.5	28.0	31.6	40.4	193
18021	7.2	12.7	30.3	37.1	32.6	221
TOT	59	115	268	302	345	915
PCT	6.4	12.6	29.3	33.0	37.7	100.0

PERIOD: (PRIMARY) 1953-1970  
(OVER-ALL) 1922-1970

MARCH

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP										
TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL DBS	PCT FREQ
45/49	.0	.0	.0	.1	.3	.4	.6	.1	12	1.6
40/44	.0	.0	.0	.4	1.7	4.7	6.5	10.7	135	23.9
35/39	.0	.3	.3	.9	2.2	8.7	14.1	19.9	358	46.3
30/34	.0	.0	.0	.0	.3	2.5	6.0	6.9	137	17.7
25/29	.0	.0	.0	.1	.1	.6	1.0	3.6	43	5.6
20/24	.0	.0	.0	.0	.3	.6	.6	1.9	27	3.5
15/19	.0	.0	.0	.0	.0	.1	.3	1.0	11	1.4
TOTAL	0	2	2	2	52	136	225	342	773	100.0
PCT	.0	.3	.3	1.8	6.7	17.6	29.1	44.2		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP										
N	NE	E	SE	S	SW	W	NW	VAR	CALM	
.0	.0	.4	.1	.4	.5	.1	.0	.0	.0	.0
.9	1.9	3.0	2.2	5.0	6.0	2.8	1.7	.0	.4	.4
3.1	3.1	5.6	4.7	6.0	7.5	9.1	6.0	.0	1.4	.4
3.0	1.6	.6	.6	.3	.8	3.5	7.0	.0	.4	.4
1.2	.5	.0	.3	.1	.4	.6	2.5	.0	.0	.0
1.0	.1	.0	.0	.0	.0	.8	1.6	.0	.0	.0
.4	.1	.0	.0	.0	.1	.1	.6	.0	.0	.0
.4	.57	.74	.61	.91	1.18	1.32	1.49	.0	.0	.0
9.6	7.4	9.6	7.9	11.8	15.3	17.1	19.3	.0	.0	2.2

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR										
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL DBS	
00603	50	48	44	38	25	18	16	36.7	331	
06609	48	45	42	37	25	18	16	35.7	314	
12615	45	43	41	36	26	19	17	35.5	273	
18621	50	44	41	37	24	19	16	35.5	326	
TOT	50	45	42	37	25	19	16	35.9	1244	

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR										
HOUR (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL DBS
00603	.0	3.5	10.0	25.0	23.0	38.5	84	200		
06609	.0	3.6	4.6	15.7	33.5	42.6	86	197		
12615	.0	1.2	5.9	16.6	33.1	43.2	86	169		
18621	.0	1.0	6.3	13.0	27.5	52.2	88	207		
TOT	0	18	52	136	225	342	86	773		

MARCH

PERIOD: (PRIMARY) 1953-1970  
(OVER-ALL) 1922-1970

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	13	17	21	25	29	33	37	41	45	49	TOT	W FOG	NO FOG
11/13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	1	.0	.1
9/10	.0	.0	.0	.0	.0	.0	.0	.0	.1	.2	3	.0	.3
7/8	.0	.0	.0	.0	.0	.0	.0	.4	.5	.0	9	.3	.6
6	.0	.0	.0	.0	.0	.0	.1	.8	.4	.0	13	.0	1.3
5	.0	.0	.0	.0	.0	.0	.5	1.7	.2	.0	24	.1	2.3
4	.0	.0	.0	.0	.0	.1	1.3	1.9	.1	.0	34	1.0	2.4
3	.0	.0	.0	.0	.0	.0	1.7	1.9	.1	.0	37	.6	3.1
2	.0	.0	.0	.0	.0	.1	4.3	2.3	.0	.0	66	1.3	5.4
1	.0	.0	.0	.0	.0	.1	6.1	.6	.0	.0	67	.8	6.0
0	.0	.0	.0	.0	.1	2.6	9.5	.5	.1	.0	127	.9	12.0
-1	.0	.0	.0	.0	.0	.0	3.7	.7	.2	.0	105	.5	10.1
-2	.0	.0	.0	.0	.3	4.1	3.6	.1	.0	.0	80	.8	7.3
-3	.0	.0	.0	.0	.4	2.8	2.5	.2	.0	.0	59	.0	6.0
-4	.0	.0	.0	.1	1.1	4.2	1.7	.3	.0	.0	73	.6	6.8
-5	.0	.0	.0	.0	1.9	2.9	1.6	.0	.0	.0	64	.3	6.2
-6	.0	.0	.0	.1	1.6	1.7	.6	.1	.0	.0	41	.4	3.7
-7/-8	.0	.0	.1	.8	2.8	1.5	.4	.0	.0	.0	56	.2	5.5
-9/-10	.0	.1	.0	.9	2.4	.4	.6	.0	.0	.0	44	.0	4.5
-11/-13	.0	.2	.3	1.7	.8	.6	.1	.0	.0	.0	37	.1	3.6
-14/-16	.1	.8	.7	.7	.4	.2	.0	.0	.0	.0	29	.1	2.8
-17/-19	.2	.3	.3	.3	.0	.0	.0	.0	.0	.0	11	.0	1.1
-20/-22	.1	.1	.4	.1	.0	.0	.0	.0	.0	.0	7	.0	.7
TOTAL	.4	1.5	1.8	4.7	11.8	24.8	40.9	11.0	1.5	.3	987	.80	90.7
PCT	.4	1.5	1.8	4.8	12.0	25.1	41.4	11.1	1.5	.3	100.0	8.1	91.9

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1970

MARCH  
TABLE 18

AREA 0007 UNIMAK  
53N-COAST 157-165M

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N					TOTAL	NE					TOTAL
	1-3	4-10	11-21	22-33	34-47		1-3	4-10	11-21	22-33	34-47	
<1	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
1-2	.0	1.3	1.9	.0	.0	15	.2	1.1	.2	.0	.0	7
3-4	.0	1.1	.8	.2	.0	10	.0	1.1	1.1	.2	.0	11
5-6	.0	.4	.6	.0	.2	6	.0	.4	.6	.2	.0	6
7	.0	.0	.8	.2	.6	8	.0	.2	.6	.0	.2	5
8-9	.0	.0	.2	.2	.0	1	.0	.4	.0	1.1	.2	10
10-11	.0	.0	.2	.2	.0	2	.0	.0	.4	.0	.2	3
12	.0	.0	.0	.2	.0	1	.0	.0	.0	.2	.0	0
13-16	.0	.0	.0	.6	.0	3	.0	.0	.0	.0	.0	0
17-19	.0	.0	.0	.2	.0	1	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
TOTAL	0	13	21	9	4	47	1	15	17	8	2	43
PCT	.0	2.8	4.5	1.9	.8	10.0	.2	3.2	3.6	1.7	.4	9.1

HGT	E					TOTAL	SE					TOTAL
	1-3	4-10	11-21	22-33	34-47		1-3	4-10	11-21	22-33	34-47	
<1	.0	.6	.0	.0	.0	3	.0	.2	.0	.0	.0	1
1-2	.0	1.1	1.1	.0	.0	10	.0	.4	.4	.4	.0	6
3-4	.0	1.3	1.3	.0	.0	12	.0	.0	1.1	.6	.0	9
5-6	.0	.2	1.5	.0	.0	8	.0	.0	.8	.2	.0	7
7	.0	.0	.8	.6	.2	8	.0	.4	.6	.0	.0	6
8-9	.0	.2	.4	.4	.0	5	.0	.4	.2	.2	.0	4
10-11	.0	.0	.0	.4	.0	2	.0	.0	.0	.0	.0	0
12	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.2	1
13-16	.0	.0	.0	.0	.2	1	.0	.4	.0	.0	.0	2
17-19	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
TOTAL	0	16	24	7	2	49	0	13	15	7	1	36
PCT	.0	3.4	5.1	1.5	.4	10.4	.0	2.8	3.2	1.5	.2	7.6



TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.0	.2	.0	.0	.0	.0	1	.0	.6	.0	.0	.0	.0	3
1-2	.0	.8	.4	.0	.0	.0	6	.0	1.1	.6	.0	.0	.0	8
3-4	.4	.8	2.5	.2	.0	.0	19	.2	1.1	3.2	.4	.0	.0	23
5-6	.0	.0	.8	.0	.0	.0	4	.0	.6	1.7	.2	.0	.0	12
7	.0	.0	1.3	.2	.2	.0	8	.0	.4	.6	.0	.2	.0	6
8-9	.0	.0	.2	1.1	.0	.0	6	.0	.0	.4	.0	.0	.0	2
10-11	.0	.0	.2	.4	.0	.0	3	.0	.0	.0	.4	.2	.0	3
12	.0	.0	.2	.0	.0	.0	1	.0	.0	.0	.2	.0	.0	1
13-16	.0	.0	.0	.0	.2	.0	1	.0	.0	.0	.0	.0	.0	0
17-19	.0	.0	.0	.2	.0	.0	1	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.1	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	2	9	27	10	2	0	50	1	18	31	6	2	0	58
PCT	.4	1.9	5.7	2.1	.4	.0	10.6	.2	3.8	6.6	1.3	.4	.0	12.3

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	GRAND TOTAL
<1	.2	.6	.0	.0	.0	.0	4	.0	.2	.0	.0	.0	.0	1	13
1-2	.2	2.5	.8	.0	.0	.0	17	.0	1.5	1.9	.4	.0	.0	18	87
3-4	.0	2.3	1.5	1.1	.0	.0	23	.0	.4	2.8	1.1	.0	.0	20	127
5-6	.0	.6	3.2	.8	.0	.0	22	.0	.0	2.5	1.1	.0	.0	17	82
7	.0	.2	1.3	.4	.2	.0	10	.0	.4	2.4	2.5	.4	.2	19	70
8-9	.0	.0	.6	.4	.0	.0	5	.0	.2	1.5	.6	.4	.2	14	47
10-11	.0	.0	.2	.4	.2	.0	4	.0	.0	.0	.4	.2	.0	3	18
12	.0	.0	.0	.2	.2	.0	2	.0	.0	.0	.4	.2	.0	3	12
13-16	.0	.0	.0	.2	.6	.0	4	.0	.0	.0	.0	.4	.0	2	13
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
TOTAL	2	30	36	17	6	0	91	0	13	43	31	8	2	97	471
PCT	.4	6.4	7.6	3.6	1.3	.0	19.3	.0	2.8	9.1	6.6	1.7	.4	20.6	100.0

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1970

MARCH

TABLE 18 (CONT)

AREA 0007 UNIMAK  
53N-COAST 157-165M

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL DBS
	0-3	4-10	11-21	22-33	34-47	48+	0-3	4-10	11-21	22-33	
<1	5.6	2.4	.0	.0	.0	.0	40				40
1-2	.8	9.5	6.9	.4	.0	.0	89				89
3-4	1.0	7.9	13.3	3.4	.0	.0	129				129
5-6	.4	2.2	11.1	2.8	.2	.0	70				70
7	.0	1.6	6.2	4.0	.4	.2	47				47
8-9	.0	1.2	3.8	3.8	.8	.0	18				18
10-11	.0	.0	.6	2.2	.6	.0	12				12
12	.0	.0	.6	1.2	1.4	.0	13				13
13-16	.0	.4	.0	.8	.0	.0	2				2
17-19	.0	.0	.0	.4	.0	.0	0				0
20-22	.0	.0	.0	.0	.0	.0	0				0
23-25	.0	.0	.0	.0	.0	.0	0				0
26-32	.0	.0	.0	.0	.0	.0	0				0
33-40	.0	.0	.0	.0	.0	.0	0				0
41-48	.0	.0	.0	.0	.0	.0	0				0
49-60	.0	.0	.0	.0	.0	.0	0				0
61-70	.0	.0	.0	.0	.0	.0	0				0
71-86	.0	.0	.0	.0	.0	.0	0				0
87+	.0	.0	.0	.0	.0	.0	0				0
TOTAL	39	127	214	95	27	2	504				504
PCT	7.7	25.2	42.5	18.8	5.4	.4	100.0				100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+ TOTAL	MEAN HGT	
<6	.5	7.9	14.6	7.8	7.0	3.4	.3	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	258	4
6-7	.0	.3	3.7	6.1	6.3	3.4	1.9	1.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	145	6
8-9	.0	.0	1.4	1.6	1.9	1.9	1.5	1.0	2.1	.3	.2	.0	.0	.0	.0	.0	.0	.0	.0	77	8
10-11	.0	.0	.3	.8	1.5	1.6	1.3	1.0	.3	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	43	8
12-13	.0	.0	.0	.2	.2	.8	.3	.3	.3	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	14	9
>13	.0	.0	.0	.0	.0	.0	.5	.0	.2	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	5	13
INDET	12.1	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	76	0
TOTAL	78	51	128	102	104	69	36	22	22	4	2	0	0	0	0	0	0	0	0	618	5
PCT	12.6	8.3	20.7	16.5	16.8	11.2	5.8	3.6	3.6	.6	.3	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

APRIL

PERIOD: (PRIMARY) 1954-1970  
(OVER-ALL) 1902-1970

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW	OTHER					PCPN	FOG WD	SMOKE HAZE	DUST BLWG	NO SIG WEA	
N	.0	.1	.0	.0	.5	.0	.0	.5	6	.0	.3	.1	.0	.1	5.1	67
NNE	.2	.0	.0	.0	.1	.0	.0	.3	3	.0	.1	.0	.0	.0	2.6	33
NE	.3	.0	.4	.1	.3	.0	.0	1.0	11	.0	.1	.0	.0	.0	2.2	36
ENE	.5	.2	.2	.0	.2	.0	.0	1.0	11	.0	.3	.0	.0	.0	2.5	41
E	.2	.0	.4	.0	.0	.0	.0	.5	6	.0	.5	.0	.0	.2	2.8	44
ESE	.3	.0	.2	.0	.3	.0	.0	.6	7	.0	.5	.0	.0	.0	1.7	32
SE	1.0	.0	.4	.0	.2	.0	.0	1.5	16	.0	.5	.0	.0	.0	2.5	49
SSE	.7	.0	.5	.0	.1	.0	.1	1.3	14	.0	.6	.0	.0	.0	2.6	50
S	.8	.0	.9	.0	.2	.0	.0	1.7	19	.0	1.0	.0	.0	.1	5.1	87
SSW	.8	.0	.5	.0	.3	.0	.0	1.6	18	.0	.2	.1	.0	.0	4.4	69
SW	.5	.2	.3	.0	.4	.0	.1	1.4	15	.0	.4	.2	.0	.0	6.5	92
WSW	.1	.0	.3	.0	.0	.0	.1	.5	5	.0	.5	.0	.0	.0	5.7	74
W	.2	.0	.3	.0	.5	.0	.0	.9	10	.0	.2	.1	.0	.0	11.8	142
WNW	.1	.1	.1	.0	.5	.0	.0	.5	6	.0	.0	.1	.0	.1	8.8	104
NW	.1	.0	.0	.0	.4	.0	.3	.7	8	.0	.0	.0	.0	.0	8.3	99
NNW	.0	.1	.1	.0	.5	.0	.0	.5	6	.0	.1	.0	.0	.0	3.8	49
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
CALM	.1	.0	.0	.0	.0	.1	.0	.2	2	.0	.1	.0	.0	.0	2.3	28
TOT OBS	64	7	48	1	45	1	6	14.9	163	0	59	6	5	5	863	1096
TOT PCT	5.8	.6	4.4	.1	4.1	.1	.5	14.9	163	.0	5.4	.5	.5	.5	78.7	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW	OTHER					PCPN	FOG WD	SMOKE HAZE	DUST BLWG	NO SIG WEA	
00003	4.9	.3	3.3	.0	4.6	.0	.7	13.4	41	.0	8.2	.7	.0	1.0	76.7	305
06009	4.3	1.1	4.3	.0	3.2	.0	.4	12.6	35	.0	5.4	.7	.0	.4	80.9	278
12015	6.0	.4	4.9	.4	5.3	.0	1.1	16.9	45	.0	4.5	.8	.0	.0	77.8	266
18021	8.0	.8	5.0	.0	3.8	.4	.0	16.8	44	.0	3.4	.0	.0	.4	79.4	262
TOT	64	7	48	1	47	1	6	14.9	165	0	61	6	5	5	874	1111
PCT	5.8	.6	4.3	.1	4.2	.1	.5	14.9	165	.0	5.5	.5	.5	.5	78.7	100.0

PERIOD: (PRIMARY) 1954-1970  
(OVER-ALL) 1902-1970

APRIL

TABLE 3

AREA 0007 UNIMAK  
53N-CDAST 157-165W

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)									
	0-3	4-10	11-21	22-33	34-47	48+	00	03	06	09				12	15	18	21						
N	.2	1.6	2.6	1.6	.2	.1	79	6.2	17.6	8.0	.0	4.6	5.6	4.3	.0	6.5	8.3						
NNE	.1	.9	1.1	.5	.0	.0	33	2.6	15.1	2.4	3.7	2.3	5.6	4.5	.0	1.4	.0						
NE	.1	1.1	1.5	.3	.3	.0	42	3.3	16.4	4.0	3.7	2.9	5.6	3.3	.0	3.1	.0						
ENE	.2	.9	1.3	.9	.2	.0	45	3.5	16.6	2.4	.0	3.9	5.6	2.6	5.3	5.5	.0						
E	.2	1.3	1.8	.4	.0	.0	48	3.7	13.3	3.1	3.7	4.6	.0	3.7	.0	4.5	.0						
ESE	.0	1.0	1.4	.3	.2	.0	37	2.9	14.9	3.7	3.7	3.9	.0	3.3	.0	1.0	.0						
SE	.1	1.9	1.6	1.2	.2	.1	66	5.1	16.3	4.6	3.7	4.6	11.1	3.7	.0	7.9	4.2						
SSE	.0	.9	1.9	.9	.3	.1	52	4.1	19.2	4.9	7.4	2.9	.0	3.3	5.3	5.1	.0						
S	.2	1.7	3.1	1.9	.6	.0	98	7.6	18.4	7.3	.0	9.4	11.1	9.7	10.5	4.8	4.2						
SSW	.1	1.2	3.7	.9	.5	.1	81	6.3	17.9	5.8	.0	5.5	11.1	6.3	47.4	5.1	8.3						
SW	.2	2.3	4.1	1.7	.3	.0	109	8.5	16.8	10.4	11.1	7.8	.0	9.7	5.3	8.6	4.2						
WSW	.1	1.6	3.7	1.6	.4	.0	95	7.4	17.9	6.7	22.2	7.8	5.6	5.6	5.3	8.6	8.3						
W	.5	3.2	5.6	3.2	.5	.0	167	13.0	16.8	11.6	18.5	16.0	11.1	10.8	5.3	12.0	33.3						
WNW	.2	1.2	4.9	2.7	.2	.2	122	9.5	19.1	9.5	14.8	8.1	27.8	10.0	.0	9.9	4.2						
NW	.3	2.0	3.5	2.4	1.0	.0	119	9.3	19.6	4.3	7.4	4.6	.0	10.0	10.5	9.6	16.7						
NNW	.1	.9	1.9	1.2	.2	.1	57	4.4	18.4	.0	.0	.0	.0	3.3	.0	6.2	8.3						
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0						
CALM	2.6	305	560	279	66	7	1283	2.6	.0	1.8	.0	2.9	.0	3.7	5.3	2.4	.0						
TOT OBS	66	23.8	43.6	21.7	5.1	.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0						
TOT PCT	5.1	23.8	43.6	21.7	5.1	.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0						

TABLE 3A

WIND DIR	0-6	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)											
		7-16	17-27	28-40	00					03	06	09	12	15	18	21					
N	1.2	3.5	3.0	.8	.2	112	8.7	16.9	10.4	3.7	6.8	11.1	10.8	.0	7.9	8.3					
NE	1.2	2.6	1.9	1.0	.1	87	6.8	16.5	6.4	3.7	6.8	11.1	5.9	5.3	8.6	.0					
E	1.5	2.9	1.9	.4	.0	85	6.6	14.0	6.7	7.4	8.5	.0	7.1	.0	5.5	.0					
SE	1.1	3.8	2.9	1.2	.2	118	9.2	17.6	9.5	11.1	7.5	11.1	7.1	5.3	13.0	4.2					
S	1.4	5.2	5.1	2.0	.2	179	14.0	18.2	13.1	.0	15.0	22.2	16.0	57.9	9.9	12.5					
SW	1.1	7.5	5.2	1.9	.2	204	15.9	17.3	17.1	33.3	15.6	5.6	10.5	15.1	12.5	15.1					
W	2.0	8.8	9.1	2.3	.3	289	22.5	17.8	21.1	33.3	24.1	38.9	20.8	5.3	21.9	37.5					
NW	1.1	5.5	4.1	2.8	.2	176	13.7	19.2	13.8	7.4	12.7	.0	13.4	10.5	15.8	25.0					
VAR	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0					
CALM	2.6	510	425	159	19	33	2.6	.0	1.8	.0	2.9	.0	3.7	5.3	2.4	.0					
TOT OBS	170	510	425	159	19	1263	100.0	17.1	327	27	307	18	269	19	292	24					
TOT PCT	13.3	39.8	33.1	12.4	1.5		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0					

APRIL

PERIOD: (PRIMARY) 1954-1970  
(OVER-ALL) 1902-1970

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	1-3	4-10	11-21	22-35	WIND SPEED (KNOTS) 48+	CALM	MEAN	PCT FREQ	TOTAL OBS
00003	2.0	21.5	46.0	22.3	5.9	1.7	17.6	100.0	354
06009	2.5	25.5	42.2	20.0	6.8	2.8	17.2	100.0	325
12015	1.7	28.5	43.8	19.4	2.8	3.8	15.7	100.0	288
18021	4.1	20.3	42.4	25.0	4.7	2.2	17.6	100.0	316
TOT	33	305	560	279	66	33	17.1		1283
PCT	2.6	23.8	43.6	21.7	5.1	2.6		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION							TOTAL OBS	MEAN CLOUD COVER
	0-2	3-4	5-7	8 &	OBSCD	8 &	OBSCD		
N	1.2	.7	2.5	1.8				60	5.4
NNE	.9	.1	.4	1.3				27	5.2
NE	.6	.3	.4	1.8				30	5.8
ENE	.0	.3	.8	2.5				35	7.2
E	.1	.1	.9	2.5				35	7.2
ESE	.3	.1	.2	2.4				29	7.0
SE	.0	.0	.5	3.2				36	7.8
SSE	.1	.0	.5	3.6				41	7.7
S	.2	.3	1.5	5.5				73	7.3
SSW	.2	.4	2.0	3.3				57	6.9
SW	.4	1.3	2.6	3.6				77	6.4
WSW	1.0	.8	2.1	3.2				69	6.0
W	2.2	2.7	4.5	4.9				139	5.5
WNW	2.1	1.3	4.5	2.3				99	5.1
NW	2.5	1.6	2.7	3.0				95	5.0
NNW	.8	.8	1.3	1.4				43	5.2
VAR	.0	.0	.0	.0				0	.0
CALM	.5	.6	.3	1.2				26	5.4
TOT OBS	128	113	270	460				971	6.1
TOT PCT	13.2	11.6	27.8	47.4				100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	NH <5/8										NH <5/8 TOTAL
	000	149	150	299	300	599	600	999	1000	2000	
N	.3	.0	.0	.0	.1	.1	.8	1.3	.6	.5	60
NNE	.1	.0	.0	.0	.1	.1	.1	.8	.2	.2	27
NE	.3	.0	.0	.0	.2	.4	.4	.9	.1	.0	30
ENE	.1	.1	.1	.1	.4	.5	.5	1.4	.2	.3	35
E	.6	.0	.0	.0	.6	.3	.3	.7	.4	.4	35
ESE	.2	.0	.0	.0	.2	.4	.4	.9	.5	.2	29
SE	.6	.1	.2	.2	.2	.3	.3	1.3	.5	.2	36
SSE	.8	.2	.1	.1	.1	1.0	1.1	1.1	.4	.1	41
S	1.0	.1	.2	.2	.2	1.1	1.1	2.7	.7	.3	73
SSW	.7	.0	.0	.0	.3	.6	.6	1.5	1.1	.0	57
SW	.8	.1	.1	.1	.2	.6	.7	1.9	1.0	.2	77
WSW	.1	.1	.1	.1	.1	.7	1.8	3.0	1.8	.6	69
W	.5	.1	.1	.1	.3	1.8	3.0	1.8	1.8	.4	139
WNW	.2	.1	.1	.1	.0	.5	2.9	1.8	.9	.3	99
NW	.2	.0	.0	.0	.4	1.3	1.3	.6	.7	.8	95
NNW	.2	.3	.1	.1	.1	.4	.4	.6	.0	.2	43
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.1	.0	.0	.0	.0	.2	.2	.3	.4	.0	26
TOT OBS	68	11	35	109	242	121	45	5	.7	.3	971
TOT PCT	7.0	1.1	3.6	11.2	24.9	12.5	4.6	.5	.7	.3	100.0

PERIOD: (PRIMARY) 1954-1970  
(OVER-ALL) 1902-1970

APRIL

AREA 0007 UNIMAK  
53N-COAST 157-165M

TABLE 7  
CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH  $\geq 4/8$ ) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)									
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0		
= OR >6500	.5	.7	.9	1.0	1.1	1.1	1.1	1.1		
= OR >5000	1.0	1.2	1.4	1.5	1.6	1.6	1.6	1.6		
= OR >3500	5.2	5.9	6.1	6.2	6.3	6.3	6.3	6.3		
= OR >2000	12.0	17.4	18.5	18.6	18.7	18.7	18.7	18.8		
= OR >1000	26.7	38.7	42.3	42.9	43.1	43.3	43.3	43.4		
= OR >600	31.4	48.2	53.0	53.7	54.1	54.3	54.3	54.4		
= OR >300	32.1	50.3	55.8	57.1	57.6	57.8	57.9	58.0		
= OR >150	32.1	51.0	56.5	58.2	58.7	58.9	59.0	59.1		
= OR >0	32.2	52.1	58.7	61.9	63.1	65.1	66.1	66.2		
TOTAL	315	510	575	606	618	637	647	648		

TOTAL NUMBER OF OBS: 979

PCT FREQ NH  $\leq 5/8$ : 33.8

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8	8 OBSCD	TOTAL
	7.9	3.9	7.1	7.4	7.4	6.6	11.9	9.8	32.0	6.0	1051

APRIL

PERIOD: (PRIMARY) 1954-1970  
(OVER-ALL) 1902-1970

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.0	.0	.2	.1	.1	.1	.0	.0	.0	.1	.1	.0	.0	.0	.0	.1	.0	.0	8	.7
NO PCP	.1	.1	.1	.0	.2	.0	.2	.2	.5	.3	.2	.4	.1	.0	.0	.0	.0	.1	25	2.3
TOTAL	1	1	3	1	3	1	2	2	5	4	3	4	1	0	0	1	0	1	33	3.0
PCP	.0	.1	.1	.0	.0	.0	.1	.0	.0	.1	.0	.0	.2	.0	.1	.0	.0	.0	7	.6
NO PCP	.0	.0	.0	.0	.0	.2	.1	.4	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	10	.9
TOTAL	0	1	1	0	0	2	2	4	3	1	0	0	2	0	1	0	0	0	17	1.6
PCP	.3	.1	.0	.3	.1	.2	.4	.3	.2	.2	.1	.0	.1	.0	.1	.1	.0	.0	25	2.3
NO PCP	.0	.0	.0	.1	.1	.2	.1	.1	.3	.0	.1	.2	.2	.0	.1	.0	.0	.0	15	1.4
TOTAL	3	1	0	4	2	4	5	4	5	2	2	2	3	0	2	1	0	0	40	3.7
PCP	.0	.0	.3	.4	.1	.1	.4	.3	.7	.4	.5	.1	.2	.1	.1	.2	.0	.0	40	3.7
NO PCP	.0	.0	.2	.1	.4	.2	.1	.3	.8	.2	.7	.3	.5	.5	.0	.1	.0	.1	48	4.4
TOTAL	0	0	5	5	5	3	5	6	17	6	13	4	7	7	1	3	0	1	88	8.1
PCP	.3	.1	.3	.1	.2	.2	.5	.5	.6	.6	.4	.4	.3	.1	.0	.1	.0	.1	51	4.7
NO PCP	1.6	.9	.5	1.1	1.1	.7	.9	.9	1.9	1.5	2.5	1.7	3.2	1.8	1.9	.9	.0	.4	258	23.6
TOTAL	20	11	9	13	14	10	15	16	28	23	31	23	38	21	21	11	0	5	309	28.3
PCP	.1	.0	.2	.2	.1	.1	.1	.2	.2	.3	.3	.0	.1	.4	.5	.1	.0	.1	30	2.7
NO PCP	3.9	1.7	1.5	1.5	1.7	1.0	1.6	1.4	2.5	2.7	3.6	3.8	8.2	6.6	6.2	2.9	.0	1.8	575	52.7
TOTAL	44	19	18	18	20	12	19	17	29	33	42	41	90	76	73	33	0	21	605	55.4
TOTAL PCT	68 6.2	33 3.0	36 3.3	41 3.8	44 4.0	32 2.9	48 4.4	49 4.5	87 8.0	69 6.3	91 8.3	74 6.8	141 12.9	104 9.5	98 9.0	49 4.5	0	28 2.6	1092 100.0	



PERIOD: (PRIMARY) 1954-1970  
(OVER-ALL) 1902-1970

APRIL

TABLE 9  
AREA 0007 UNIMAK  
53N-COAST 157-165M

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	2	.2
	4-10	.1	.1	.0	.1	.0	.0	.0	.0	.2	.1	.1	.1	.0	.0	.0	.0	.0	.0	8	.6
	11-21	.0	.0	.2	.0	.1	.2	.1	.1	.0	.2	.2	.0	.1	.0	.0	.0	.0	.0	16	1.3
	22+	.0	.0	.0	.0	.1	.0	.2	.1	.0	.1	.0	.2	.0	.0	.0	.1	.0	.0	9	.7
	TOTAL	1	1	3	1	3	2	3	2	5	4	3	4	1	0	0	1	0	1	35	2.7
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	4-10	.0	.0	.0	.0	.0	.1	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	2	.2
	11-21	.0	.0	.1	.0	.0	.2	.0	.2	.2	.1	.0	.0	.2	.0	.1	.0	.0	.0	9	.7
	22+	.0	.1	.0	.0	.0	.0	.1	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	6	.5
	TOTAL	0	1	1	0	0	2	2	4	3	1	0	0	2	0	1	0	0	0	17	1.3
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	1	.1
	4-10	.2	.0	.0	.0	.0	.1	.1	.0	.2	.1	.1	.0	.0	.0	.1	.0	.0	.0	9	.7
	11-21	.1	.1	.0	.1	.2	.1	.2	.1	.0	.2	.1	.0	.2	.0	.0	.0	.0	.0	15	1.2
	22+	.0	.0	.0	.3	.0	.2	.2	.2	.2	.0	.0	.2	.0	.0	.0	.1	.0	.0	17	1.3
	TOTAL	3	1	0	5	2	4	5	4	5	3	2	2	3	0	2	1	0	0	42	3.3
2<5	0-3	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.2	4	.3
	4-10	.0	.0	.2	.0	.0	.0	.1	.1	.2	.1	.0	.1	.1	.1	.1	.1	.0	.0	12	.9
	11-21	.1	.0	.2	.2	.4	.2	.2	.2	.6	.2	.5	.3	.2	.3	.0	.0	.0	.0	44	3.5
	22+	.0	.0	.2	.2	.0	.1	.2	.2	.5	.2	.5	.0	.7	.2	.0	.2	.0	.0	33	2.6
	TOTAL	1	0	5	5	5	3	5	6	17	7	13	5	7	8	1	3	0	2	93	7.3
5<10	0-3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.1	.1	.0	.5	12	.9
	4-10	.2	.1	.2	.2	.5	.4	.5	.7	.9	.4	.6	.2	.8	.9	.3	.4	.0	.0	64	5.0
	11-21	.7	.5	.5	.3	.6	.2	.5	.5	1.2	1.2	1.3	1.5	.8	.7	.7	.4	.0	.0	156	12.2
	22+	.6	.2	.1	.2	.2	.2	.5	.5	1.2	.6	.8	.8	1.6	.6	.7	.4	.0	.0	119	9.3
	TOTAL	21	11	10	13	18	13	19	16	33	28	34	32	40	22	23	11	0	7	351	27.5
10+	0-3	.1	.1	.1	.2	.2	.0	.1	.0	.2	.1	.1	.1	.5	.2	.2	.0	.0	1.8	47	3.7
	4-10	1.1	.8	.7	.5	.8	.5	1.2	.6	.7	.5	1.4	1.3	2.5	1.1	1.5	.9	.0	.0	206	16.2
	11-21	1.7	.5	.6	.5	.5	.5	.7	.6	1.3	1.9	2.0	1.9	4.1	3.6	2.7	1.6	.0	.0	317	24.9
	22+	1.3	.2	.4	.4	.1	.0	.5	.2	.5	.5	.8	.9	1.6	2.3	2.7	.8	.0	.0	166	13.0
	TOTAL	53	19	23	21	20	13	31	19	35	38	55	52	111	91	91	41	0	23	736	57.8
	TOTAL PCT	79	33	42	45	48	37	65	51	98	81	107	95	164	121	118	57	0	33	1274	100.0
		6.2	2.6	3.3	3.5	3.8	2.9	5.1	4.0	7.7	6.4	8.4	7.5	12.9	9.5	9.3	4.5	.0	2.6	100.0	

APRIL

PERIOD: (PRIMARY) 1954-1970  
(OVER-ALL) 1902-1970

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH > 4/8), AND  
OCCURRENCE OF NH < 5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH < 5/8 ANY HGT	TOTAL OBS
00003	7.1	.7	2.1	9.6	21.7	16.4	6.0	.7	.4	.4	65.1	34.9	281
06009	6.0	.8	4.4	12.7	27.9	10.0	5.2	.4	1.2	.8	69.3	30.7	251
12015	8.9	.9	4.9	8.9	23.1	8.0	3.1	.0	1.3	.0	59.1	40.9	225
18021	5.6	2.4	2.8	12.0	24.0	13.2	3.6	.8	.4	.0	64.8	35.2	250
TOT	69	12	35	109	243	122	46	5	8	3	652	355	1007
PCT	6.9	1.2	3.5	10.8	24.1	12.1	4.6	.5	.8	.3	64.7	35.3	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	3.7	1.5	3.3	5.9	19.6	66.1	271
06009	3.7	1.2	3.3	6.6	26.3	58.8	243
12015	3.6	.0	2.7	6.8	34.2	52.7	222
18021	1.6	2.1	3.3	9.1	26.7	57.2	243
TOT	31	12	31	69	258	578	979
PCT	3.2	1.2	3.2	7.0	26.4	59.0	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET, NH > 4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH < 5/8 AND 5+	TOTAL OBS
00003	7.4	10.3	24.7	42.4	32.8	271
06009	6.6	13.6	29.6	41.2	29.2	243
12015	9.0	14.9	29.3	31.1	39.6	222
18021	5.8	11.9	28.8	39.1	32.1	243
TOT	70	123	274	379	326	979
PCT	7.2	12.6	28.0	38.7	33.3	100.0

PERIOD: (PRIMARY) 1954-1970  
(OVER-ALL) 1902-1970

APRIL

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 13

TEMP F	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP										TOTAL DBS	PCT FREQ	PERCENT FREQUENCY OF WIND DIRECTION BY TEMP									
	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	N	NE			E	SE	S	SW	W	NW	VAR	CALM		
50/54	.0	.0	.0	.0	.5	.1	.2	.0		7	.8	.2	.2	.0	.2	.0	.0	.0	.0			
45/49	.0	.0	.0	.0	1.0	.7	.9	.6		28	3.2	.3	.2	.0	.5	.3	.5	.8	.0			
40/44	.0	.0	.2	.6	2.2	5.4	9.9	11.3		259	29.5	1.9	1.1	2.5	2.5	6.7	5.1	7.5	.0			
35/39	.0	.0	.0	.7	2.3	6.6	16.1	25.6		450	51.3	3.6	3.8	3.6	6.2	6.9	9.1	10.4	.0			
30/34	.0	.0	.0	.0	1.3	2.2	3.0	5.8		107	12.2	1.9	.8	.8	.2	.2	.8	3.0	.0			
25/29	.0	.0	.0	.0	.0	.5	.5	1.7		23	2.6	1.0	.1	.0	.0	.0	.0	.7	.0			
20/24	.0	.0	.0	.0	.0	.0	.0	.5		4	.5	.1	.0	.0	.0	.0	.1	.1	.0			
TOTAL	0	0	2	11	63	135	208	399		878	100.0	9.2	6.3	6.9	9.6	14.2	15.5	22.4	.0			
PCT	.0	.0	.2	1.3	7.2	15.4	30.5	45.4											1.7			

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR													PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR										
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL DBS				HOUR (GMT)	0-29	30-59	60-69	70-79	80-89	90-100	MEAN	TOTAL DBS		
00603	51	50	47	40	31	25	24	39.3	348				00603	.0	2.9	10.3	20.2	28.5	38.0	83	242		
06609	50	49	43	38	30	24	22	37.9	325				06609	.0	1.3	9.7	13.2	32.2	43.6	85	227		
12615	46	43	41	37	30	25	22	36.9	288				12615	.0	.5	7.3	14.7	31.0	50.5	87	184		
18621	51	46	43	38	30	25	23	37.3	316				18621	.0	.9	4.8	13.1	30.6	50.7	87	229		
TOT	51	48	43	38	30	25	22	37.9	1277				TOT	0	13	64	136	269	400	86	882		

TABLE 16

PERIOD: (PRIMARY) 1954-1970  
(OVER-ALL) 1902-1970

APRIL

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	21	25	29	33	37	41	45	49	TOT	W	WD
	24	28	32	36	40	44	48	52		FOG	FOG
11/13	.0	.0	.0	.0	.0	.0	.2	.2	4	.0	.4
9/10	.0	.0	.0	.0	.2	.2	.4	.4	12	.0	1.2
7/8	.0	.0	.0	.0	.0	.7	.4	.0	11	.1	1.0
6	.0	.0	.0	.0	.2	.6	.3	.2	13	.0	1.3
5	.0	.0	.0	.0	.7	2.2	.5	.1	35	.3	3.3
4	.0	.0	.0	.0	1.7	1.9	.2	.0	38	.5	3.4
3	.0	.0	.0	.0	2.2	1.7	.2	.0	41	.5	3.7
2	.0	.0	.0	.8	5.4	3.3	.1	.0	94	.8	8.8
1	.0	.0	.0	.2	4.5	1.7	.1	.0	64	.7	5.8
0	.0	.0	.1	1.5	9.0	1.8	.0	.1	123	.4	12.2
-1	.0	.0	.1	1.3	6.4	.7	.1	.0	85	.5	6.2
-2	.0	.0	.1	2.8	7.8	.9	.0	.0	113	.5	11.0
-3	.0	.0	.2	3.2	3.2	.1	.0	.0	65	.5	6.1
-4	.0	.0	.1	3.2	3.7	.1	.1	.0	70	.2	6.9
-5	.0	.0	.8	3.2	1.7	.5	.0	.0	61	.2	6.0
-6	.0	.0	.7	1.5	.9	.1	.0	.0	32	.0	3.3
-7/-8	.0	.2	1.1	1.9	1.2	.2	.0	.0	46	.2	4.5
-9/-10	.1	.3	1.3	1.0	.9	.1	.0	.0	37	.0	3.8
-11/-13	.1	.9	1.2	.3	.3	.0	.0	.0	28	.0	2.9
-14/-16	.1	.3	.3	.0	.0	.0	.0	.0	7	.1	.6
TOTAL	3	17	60	205	491	167	26	10	979	55	924
PCT	.3	1.7	6.1	20.9	50.2	17.1	2.7	1.0	100.0	5.6	94.4

PERIOD: (PRIMARY) APRIL AREA 0007 UNIMAK  
(OVER-ALL) 1963-1970 53N-COAST 157-165W

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N					NE					48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47		
<1	.2	.9	.0	.0	.0	.2	.2	.0	.0	.0	.0	2
1-2	.0	1.9	.0	.0	.0	.2	.7	.9	.0	.0	.0	8
3-4	.0	.7	2.1	.0	.0	.0	.7	.7	.9	.0	.0	10
5-6	.0	.0	.5	.7	.0	.0	.2	.2	.2	.0	.0	3
7	.0	.0	.7	.2	.0	.0	.0	.2	.2	.5	.0	2
8-9	.0	.1	.2	.9	.0	.0	.0	.0	.2	.0	.0	3
10-11	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	0
12	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	1
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	1	15	15	9	1	2	8	9	7	3	0	29
PCT	.2	3.5	3.5	2.1	.2	.5	1.9	2.1	1.6	.7	.0	6.8

HGT	E					SE					48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47		
<1	.0	.9	.0	.0	.0	.0	.2	.0	.0	.0	.0	5
1-2	.0	.9	.2	.0	.0	.0	.7	.5	.0	.0	.0	11
3-4	.0	.5	2.1	.0	.0	.0	1.2	.9	.5	.0	.0	15
5-6	.0	.0	1.4	.0	.0	.0	.2	1.9	1.4	.0	.0	5
7	.0	.0	.2	.2	.0	.0	.0	.5	.5	.2	.0	6
8-9	.0	.0	.0	.0	.2	.2	.5	.5	.2	.0	.0	6
10-11	.0	.0	.0	.0	.0	.0	.5	.0	.2	.2	.0	2
12	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0	0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	0	10	17	5	1	1	13	18	16	3	0	51
PCT	.0	2.3	4.0	1.2	.2	.2	3.0	4.2	3.7	.7	.0	11.9

AREA 0007 UNIMAK  
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TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	W							NW							TOTAL	GRAND TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+			
<1	.0	.9	.0	.0	.0	.0	4	.2	.2	.0	.0	.0	.0	2	26	
1-2	.2	1.4	.9	.0	.0	.0	11	.2	1.2	.5	.0	.0	.0	8	64	
3-4	.0	.7	2.6	.9	.0	.0	18	.0	.7	2.1	.5	.0	.0	14	114	
5-6	.0	.5	3.3	2.1	.0	.0	25	.0	.0	.7	.2	.5	.0	6	83	
7	.0	.5	1.5	.9	.0	.0	8	.0	.2	1.2	.2	.2	.0	8	51	
8-9	.0	.2	1.2	1.6	.0	.0	13	.0	.2	.5	.5	.7	.0	8	42	
10-11	.0	.0	.2	.5	.0	.0	3	.0	.0	.2	.7	.2	.0	5	25	
12	.0	.0	.0	.2	.0	.0	1	.0	.0	.0	.5	.0	.0	2	10	
13-16	.0	.0	.0	.0	.2	.0	1	.0	.0	.5	.2	.2	.0	4	11	
17-19	.0	.0	.0	.5	.0	.0	2	.0	.0	.0	.0	.0	.0	3	2	
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0	
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0	
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0	
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0	
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0	
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0	
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0	
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0	
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0	
TOTAL	1	18	37	29	1	0	86	2	11	24	12	8	0	57	428	
PCT	.2	4.2	8.6	6.8	.2	.0	20.1	.5	2.6	5.6	2.8	1.9	.0	13.3	100.0	

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1970

APRIL

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	5.6	4.7	.0	.0	.0	.0					46
1-2	.7	8.9	4.7	.0	.0	.0					64
3-4	.2	6.7	14.7	4.0	.0	.0					115
5-6	.0	1.6	10.5	6.0	.4	.0					83
7	.0	.9	5.8	3.1	1.6	.0					51
8-9	.2	.7	2.9	4.0	1.6	.0					42
10-11	.0	.4	1.3	2.9	.9	.0					25
12	.0	.0	.2	1.6	.4	.0					10
13-16	.0	.0	.4	1.3	.7	.0					11
17-19	.0	.0	.0	.4	.0	.0					2
20-22	.0	.0	.0	.0	.0	.0					0
23-25	.0	.0	.0	.0	.0	.0					0
26-32	.0	.0	.0	.0	.0	.0					0
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	30	107	182	105	25	.0					449
PCT	6.7	23.8	40.5	23.4	5.6	.0					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	2.3	7.4	12.0	8.3	3.8	2.7	1.3	.4	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	214
6-7	.0	.9	4.5	4.1	3.9	5.2	2.7	.9	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	126
8-9	.0	1	.4	3.2	2.9	2.3	2.5	.9	1.4	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	85
10-11	.0	.0	.5	1.8	2.0	.5	.9	.5	1.3	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	44
12-13	.0	.0	.0	.0	.5	.7	1.1	.2	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	16
>13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
INDET	12.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	72
TOTAL	85	52	97	97	73	64	47	16	21	5	0	0	0	0	0	0	0	0	0	0	557
PCT	15.3	9.3	17.4	17.4	13.1	11.5	8.4	2.9	3.8	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0

MAY

PERIOD: (PRIMARY) 1953-1969  
(OVER-ALL) 1909-1969

AREA 0007 UNIMAK  
53N-CDAST 157-165W

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN SHWR	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FOG WD PCPN	SMOKE	DUST BLWG	DUST SNOW	SIG WEA	
N	.1	.1	.3	.0	.0	.1	.0	.0	8	.0	.4	.1	.0	.0	4.8	89
NNE	.5	.0	.1	.0	.0	.0	.0	.6	9	.0	.3	.0	.0	.0	2.4	49
NE	.3	.0	.4	.0	.0	.1	.0	.8	12	.0	.8	.0	.0	.0	4.0	85
ENE	.5	.0	.6	.0	.0	.1	.0	1.0	16	.0	.5	.0	.1	.0	2.9	68
E	1.0	.1	1.0	.0	.0	.2	.0	2.1	32	.0	1.2	.0	.0	.0	4.6	121
ESE	.3	.0	.6	.0	.0	.0	.0	.9	14	.0	.2	.1	.0	.0	2.1	50
SE	1.8	.0	.5	.0	.0	.0	.0	2.2	34	.0	1.2	.1	.0	.0	3.8	112
SSE	.7	.0	.7	.0	.0	.1	.0	1.4	21	.0	.7	.0	.0	.0	2.5	69
S	1.0	.1	.5	.0	.0	.0	.0	1.6	24	.0	.9	.0	.0	.0	4.9	113
SSW	.2	.0	.1	.0	.0	.0	.0	.3	5	.0	.5	.1	.0	.0	3.0	60
SW	.5	.1	.3	.0	.0	.0	.0	.7	10	.0	.3	.1	.0	.0	5.4	100
WSW	.1	.0	.2	.0	.0	.1	.0	.4	6	.0	.2	.0	.0	.0	4.7	81
W	.2	.1	.6	.0	.0	.1	.0	.9	13	.0	.3	.0	.0	.0	9.5	163
WNW	.1	.0	.1	.0	.0	.1	.0	.3	4	.0	.1	.0	.0	.0	5.1	84
NW	.1	.0	.4	.0	.0	.0	.0	.5	7	.0	.1	.0	.0	.0	8.1	135
NNW	.4	.0	.1	.0	.0	.1	.0	.5	8	.0	.1	.0	.0	.0	5.1	87
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.3	.1	.0	.0	3.7	63
TOT OBS	117	6	96	0	12	0	0	.0	223	0	122	10	1	1173	1529	
TOT PCT	7.7	.4	6.3	.0	.8	.0	.0	14.6		.0	8.0	.7	.1	76.7	100.0	

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN SHWR	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FOG WD PCPN	SMOKE	DUST BLWG	DUST SNOW	SIG WEA	
00003	7.9	.5	5.3	.0	1.0	.0	.0	13.9	58	.0	7.5	1.2	.0	.0	77.4	416
06009	6.8	.5	6.8	.0	.5	.0	.0	14.0	54	.0	8.6	.3	.0	.0	77.1	385
12015	6.5	.3	6.7	.0	.5	.0	.0	13.7	51	.0	6.2	.3	.0	.0	79.8	371
18021	9.4	.3	6.0	.0	1.3	.0	.0	16.4	63	.0	9.4	.8	.3	.0	73.1	383
TOT	119	6	96	0	13	0	0		226	0	123	10	1	1195	1555	
PCT	7.7	.4	6.2	.0	.8	.0	.0	14.5		.0	7.9	.6	.1	.1	76.8	100.0



MAY

PERIOD: (PRIMARY) 1953-1969  
(OVER-ALL) 1909-1969

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+	49+	50+	51+	52+				00	03	06	09	12	15	18	21
N	.5	1.8	2.6	.7	.2	.0	.0	.0	.0	.0	100	5.8	14.0	5.5	7.1	4.8	8.7	5.8	8.7	6.5	9.1
NNE	.2	1.5	.9	.6	.1	.0	.0	.0	.0	.0	57	3.3	13.3	3.4	10.7	4.3	4.3	2.2	8.7	2.2	4.5
NE	.5	2.0	1.9	1.3	.0	.1	.0	.0	.0	.0	99	5.8	14.2	4.5	7.1	7.3	4.3	4.1	.0	7.2	6.8
ENE	.4	1.3	2.0	.6	.1	.0	.0	.0	.0	.0	74	4.3	14.1	5.0	3.6	4.0	.0	5.2	.0	3.2	6.8
E	.5	2.6	2.6	1.6	.2	.1	.0	.0	.0	.0	129	7.5	15.3	8.6	.0	.0	.0	7.2	4.3	8.2	2.3
ESE	.4	1.3	1.0	.3	.0	.0	.0	.0	.0	.0	53	3.1	12.1	3.0	.0	3.8	.0	2.5	4.3	3.5	2.3
SE	.3	1.6	3.5	1.2	.4	.0	.0	.0	.0	.0	121	7.0	16.4	7.5	.0	6.8	4.3	7.2	4.3	7.2	9.1
SSE	.2	1.3	2.1	.8	.2	.0	.0	.0	.0	.0	79	4.6	15.8	6.1	.0	5.1	.0	3.9	.0	3.7	6.8
S	.3	2.3	2.8	1.8	.2	.1	.0	.0	.0	.0	128	7.5	16.1	8.4	10.7	7.3	4.3	6.4	.0	8.5	2.3
SSW	.1	1.4	1.9	.6	.0	.0	.0	.0	.0	.0	70	4.1	13.8	5.0	3.6	3.3	8.7	4.1	.0	3.5	6.8
SW	.2	2.1	3.4	1.0	.3	.0	.0	.0	.0	.0	120	7.0	15.8	5.2	.0	7.6	8.7	6.9	8.7	8.7	6.8
WSW	.1	2.0	2.4	1.1	.1	.1	.1	.1	.1	.1	99	5.8	15.4	4.3	7.1	4.0	13.0	8.0	13.0	5.7	9.1
W	.5	3.4	4.3	1.6	.5	.1	.0	.0	.0	.0	177	10.3	15.7	11.1	10.7	11.1	4.3	9.9	13.0	9.7	4.5
WNW	.3	1.2	2.4	1.4	.3	.0	.0	.0	.0	.0	96	5.6	17.6	5.5	14.3	4.8	13.0	5.5	8.7	4.7	6.8
NW	.4	2.1	4.2	1.8	.3	.0	.0	.0	.0	.0	152	8.8	16.4	8.0	21.4	9.3	17.4	8.0	17.4	8.5	6.8
NNW	.2	1.8	3.0	.6	.1	.0	.0	.0	.0	.0	97	5.6	14.2	5.2	.0	6.1	8.7	5.5	8.7	5.7	6.8
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	3.2	3.6	.0	.0	.0	.0	.0	.0
CALM	3.9	507	704	295	51	6	.0	.0	.0	.0	67	3.9	.0	3.2	3.6	2.8	.0	7.5	.0	3.2	2.3
TOT OBS	155	29.5	41.0	17.2	3.0	.3	.0	.0	.0	.0	1718	100.0	14.7	440	28	396	23	362	23	402	44
TOT PCT	9.0	29.5	41.0	17.2	3.0	.3	.0	.0	.0	.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-6	7-16	17-27	28-40	41+	42+	43+	44+	45+	46+				00	03	06	09	12	15	18	21
N	2.0	4.4	2.0	.7	.1	.1	.1	.1	.1	.1	157	9.1	13.7	8.9	17.9	9.1	13.0	8.0	17.4	8.7	13.6
NE	2.4	3.7	3.3	.6	.1	.1	.1	.1	.1	.1	173	10.1	14.2	9.5	10.7	11.4	4.3	9.4	.0	10.4	13.6
E	2.4	4.2	3.0	.7	.2	.2	.2	.2	.2	.2	182	10.6	14.3	11.6	.0	11.4	.0	9.7	8.7	11.7	4.5
SE	1.9	4.9	3.6	1.2	.1	.1	.1	.1	.1	.1	200	11.6	16.1	13.6	.0	11.9	4.3	11.0	4.3	10.9	15.9
S	1.8	5.4	3.6	.6	.1	.1	.1	.1	.1	.1	198	11.5	15.3	13.4	14.3	10.6	13.0	10.5	.0	11.9	9.1
SW	1.6	6.3	3.4	1.4	.1	.1	.1	.1	.1	.1	219	12.7	15.6	9.5	7.1	11.6	21.7	14.9	21.7	14.4	15.9
W	2.4	6.7	4.9	1.6	.3	.3	.3	.3	.3	.3	273	15.9	16.4	17.0	25.0	15.9	17.4	15.5	21.7	14.4	11.4
NW	1.7	7.0	4.6	1.1	.0	.0	.0	.0	.0	.0	249	14.5	15.6	13.2	21.4	15.4	26.1	13.5	26.1	14.2	13.6
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	3.9	733	488	136	14	.0	.0	.0	.0	.0	67	3.9	.0	3.2	3.6	2.8	.0	7.5	.0	3.2	2.3
TOT OBS	347	42.7	28.4	7.9	.8	.0	.0	.0	.0	.0	1718	100.0	14.7	440	28	396	23	362	23	402	44
TOT PCT	20.2	42.7	28.4	7.9	.8	.0	.0	.0	.0	.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

MAY

PERIOD: (PRIMARY) 1953-1969  
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AREA 0007 UNIMAK  
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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	1-3	4-10	11-21	WIND SPEED (KNOTS)			PCT		TOTAL
				22-33	34-47	48+	MEAN	FREQ	
0000	5.1	28.6	39.7	18.8	3.8	.6	3.2	15.2	100.0
0600	4.8	34.6	42.7	13.6	1.4	.2	2.6	14.0	100.0
1200	6.0	26.8	39.2	17.7	2.9	.5	7.7	14.3	100.0
1800	4.7	28.0	42.2	18.4	3.6	.0	1	15.1	100.0
TOT	88	507	704	295	51	6	7	14.7	1718
PCT	5.1	29.5	41.0	17.2	3.0	.3	.9	100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION							TOTAL	MEAN
	0-2	3-4	5-7	8-10	11-15	16-20	21-25		
N	1.5	.7	1.1	2.0	.73	5.1			
NNE	.7	.1	.7	1.7	44	6.1			
NE	.3	.7	1.4	2.9	72	6.6			
ENE	.2	.1	1.1	3.1	62	7.1			
E	.4	.1	1.0	6.0	103	7.3			
ESE	.0	.0	.7	2.4	43	7.7			
SE	.3	.1	.6	5.4	87	7.5			
SSE	.0	.0	.6	3.8	60	7.8			
S	.1	.1	1.5	4.9	89	7.5			
SSW	.2	.4	1.0	2.7	57	6.9			
SW	.2	.9	1.7	4.0	92	6.7			
WSW	.7	.8	1.5	2.6	77	6.1			
W	1.2	1.4	4.5	3.6	145	5.9			
WNW	1.2	1.2	2.0	1.6	81	5.1			
NW	1.5	1.5	4.2	2.4	131	5.5			
NNW	2.2	.9	1.9	1.2	84	4.2			
VAR	.0	.0	.0	.0	0	.0			
CALM	1.2	.7	1.3	1.0	56	4.6			
TOT OBS	163	133	364	696	1356	6.3			
TOT PCT	12.0	9.8	26.8	51.3	100.0				

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION										TOTAL
	000	150	300	600	1000	2000	3500	5000	6500	8000+	
N	149	209	599	999	1999	3499	4999	6499	7999	ANY HGT	OBS
NNE	.2	.0	.1	.7	.7	.4	.3	.1	.0	.1	73
NE	.1	.0	.1	.9	.5	.2	.1	.0	.0	.0	44
ENE	.4	.3	.2	.7	1.5	.4	.1	.1	.1	.0	72
E	.6	.3	.1	.8	.9	.4	.3	.1	.0	.0	62
ESE	1.3	.1	.3	1.0	2.3	.9	.3	.0	.0	.0	103
SE	.4	.0	.1	1.0	.6	.4	.4	.0	.0	.0	43
SSE	1.8	.1	.5	1.0	1.5	.4	.1	.0	.1	.0	87
S	1.0	.1	.2	1.0	1.2	.7	.0	.0	.0	.0	60
SSW	.8	.4	.4	.4	1.9	1.3	.5	.1	.0	.0	89
SW	.4	.0	.1	.6	1.5	.2	.2	.0	.0	.0	57
WSW	.4	.0	.7	1.5	1.3	.4	.3	.1	.0	.0	92
W	.4	.0	.2	.6	1.3	.7	.5	.1	.0	.0	77
WNW	.4	.2	.4	1.2	2.6	1.3	.3	.2	.0	.0	145
NW	.1	.0	.1	.4	1.6	.4	.4	.1	.0	.0	81
NNW	.1	.1	.1	1.0	2.9	1.2	.1	.0	.0	.0	131
VAR	.1	.0	.1	.6	1.0	.1	.3	.0	.0	.1	84
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOT OBS	117	23	54	184	325	129	64	10	.5	.0	56
TOT PCT	8.6	1.7	4.0	13.6	24.0	9.5	4.7	.7	.4	.3	1356

PERIOD: (PRIMARY) 1953-1969  
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MAY

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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)									
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0		
= OR >6500	.4	.6	.7	.7	.7	.7	.7	.7	.7	.7
= OR >5000	1.0	1.2	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
= OR >3500	4.6	5.8	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
= OR >2000	10.5	14.1	15.4	15.5	15.5	15.6	15.7	15.7	15.7	15.7
= OR >1000	24.5	35.3	38.5	39.0	39.4	39.5	39.7	39.7	39.7	39.7
= OR >600	31.1	47.3	51.6	52.4	52.9	52.9	53.2	53.2	53.2	53.2
= OR >300	31.9	50.2	55.3	56.2	56.9	57.0	57.2	57.2	57.2	57.2
= OR >150	32.4	51.3	56.7	57.8	58.5	58.6	58.8	58.8	58.8	58.8
= OR > 0	32.8	52.9	60.7	63.5	65.0	66.1	67.2	67.2	67.2	67.2
TOTAL	450	727	833	872	893	908	923	923	923	927

TOTAL NUMBER OF OBS: 1373

PCT FREQ NH <5/8: 32.5

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

		TOTAL							
		0	1	2	3	4	5	6	7
		8.6	4.6	6.2	6.8	5.7	4.8	11.5	12.0
								32.1	7.7
									1450

PERIOD: (PRIMARY) 1953-1969  
(OVER-ALL) 1909-1969

MAY

AREA 0007 UNIMAK  
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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

WSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.0	.0	.1	.0	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.4	.3
ND PCP	.1	.1	.1	.1	.2	.1	.4	.3	.4	.1	.2	.1	.1	.0	.1	.1	.0	.0	.39	2.6
TOTAL	1	1	3	2	4	2	7	4	6	2	3	1	2	0	1	2	0	2	43	2.8
PCP	.0	.0	.2	.1	.2	.0	.1	.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	12	.8
ND PCP	.1	.0	.1	.1	.3	.1	.2	.2	.2	.1	.1	.1	.1	.0	.0	.1	.0	.0	19	1.2
TOTAL	1	0	4	3	4	1	5	3	4	2	1	1	1	0	0	1	0	0	31	2.0
PCP	.1	.0	.0	.0	.2	.2	.4	.1	.2	.0	.1	.1	.0	.0	.0	.0	.0	.0	22	1.4
ND PCP	.1	.0	.3	.1	.3	.1	.5	.3	.2	.1	.1	.1	.0	.0	.1	.0	.0	.1	36	2.4
TOTAL	4	0	4	2	8	4	13	7	6	2	3	3	0	0	1	0	0	1	58	3.8
PCP	.1	.1	.1	.3	.5	.3	.9	.5	.5	.1	.2	.1	.2	.0	.0	.1	.0	.0	58	3.8
ND PCP	.3	.1	.3	.7	1.0	.3	.3	.3	.4	.4	.6	.5	.3	.2	.3	.1	.0	.3	96	6.3
TOTAL	6	4	5	14	23	8	18	13	13	8	12	9	7	3	4	2	0	5	154	10.1
PCP	.3	.4	.2	.5	.7	.5	.7	.6	.7	.1	.3	.1	.5	.2	.4	.4	.0	.0	99	6.5
ND PCP	1.1	.5	.9	.9	1.7	.7	1.9	.7	1.4	1.1	1.6	1.2	2.4	.9	1.6	.7	.0	.7	304	19.9
TOTAL	21	13	17	20	37	17	40	20	32	19	29	20	43	17	31	16	0	11	403	26.4
PCP	.0	.0	.3	.2	.5	.0	.1	.1	.2	.0	.0	.1	.2	.1	.1	.1	.0	.0	28	1.8
ND PCP	3.7	2.0	3.1	1.5	2.5	1.1	1.8	1.3	3.1	1.8	3.4	3.0	7.0	4.1	6.4	4.3	.0	2.9	808	53.0
TOTAL	56	30	52	26	45	17	29	22	50	27	52	47	110	64	98	67	0	44	836	54.8
TOTAL	89	48	85	67	121	49	112	69	111	60	100	81	163	84	135	88	0	63	1525	100.0
PCT	5.8	3.1	5.6	4.4	7.9	3.2	7.3	4.5	7.3	3.9	6.6	5.3	10.7	5.5	8.9	5.8	.0	4.1	100.0	

MAY

PERIOD: (PRIMARY) 1953-1969  
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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.1	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	4	.2
	4-10	.0	.1	.1	.0	.1	.0	.1	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	10	.6
	11-21	.0	.0	.1	.1	.1	.1	.2	.2	.2	.1	.1	.1	.1	.0	.1	.1	.0	.0	24	1.4
	22+	.0	.0	.1	.0	.1	.0	.1	.0	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	6	.4
	TOTAL	1	1	3	2	4	2	7	5	6	2	3	1	2	0	1	2	0	2	44	2.6
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	4-10	.1	.0	.0	.1	.0	.1	.1	.1	.1	.1	.1	.0	.0	.0	.0	.1	.0	.0	9	.5
	11-21	.0	.0	.1	.1	.1	.0	.2	.1	.1	.0	.0	.0	.1	.0	.0	.0	.0	.0	11	.6
	22+	.0	.0	.1	.1	.1	.0	.1	.1	.1	.0	.1	.1	.0	.0	.0	.0	.0	.0	11	.6
	TOTAL	1	0	4	3	4	1	5	3	4	2	1	1	1	0	0	1	0	0	31	1.8
1<2	0-3	.0	.0	.1	.0	.0	.0	.1	.1	.1	.0	.1	.0	.0	.0	.1	.0	.0	.1	9	.5
	4-10	.0	.0	.1	.1	.1	.2	.1	.2	.1	.1	.1	.1	.0	.0	.0	.0	.0	.0	16	.9
	11-21	.0	.0	.0	.1	.2	.1	.4	.1	.1	.1	.1	.1	.0	.0	.0	.0	.0	.0	18	1.1
	22+	.2	.0	.1	.0	.3	.1	.2	.1	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	21	1.2
	TOTAL	4	0	5	2	9	5	14	7	7	2	3	3	0	0	1	0	0	2	64	3.7
2<5	0-3	.0	.0	.0	.1	.1	.0	.1	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.3	9	.5
	4-10	.1	.1	.2	.1	.4	.1	.2	.2	.1	.2	.1	.0	.1	.0	.1	.0	.0	.0	32	1.9
	11-21	.2	.1	.1	.5	.6	.3	.5	.2	.0	.1	.4	.1	.0	.0	.2	.1	.0	.0	62	3.6
	22+	.0	.2	.1	.2	.3	.1	.4	.4	.7	.2	.4	.5	.3	.0	.0	.0	.0	.0	60	3.5
	TOTAL	6	5	6	15	24	8	20	13	13	8	14	10	7	3	4	2	0	5	163	9.5
5<10	0-3	.0	.1	.0	.0	.1	.0	.0	.1	.2	.1	.0	.0	.1	.1	.2	.0	.0	.7	28	1.6
	4-10	.4	.2	.4	.4	.5	.6	.6	.1	.6	.2	.6	.5	.6	.2	.5	.4	.0	.0	118	6.9
	11-21	.6	.3	.4	.6	.9	.2	1.3	.8	.9	.7	.7	.4	1.3	.4	.6	.4	.0	.0	182	10.6
	22+	.4	.2	.2	.2	.8	.1	.6	.3	.5	.2	.5	.5	.8	.5	.6	.2	.0	.0	111	6.5
	TOTAL	25	13	18	20	40	17	43	23	37	23	31	22	48	19	32	16	0	12	439	25.6
10+	0-3	.5	.2	.4	.4	.3	.3	.2	.1	.0	.1	.1	.1	.4	.2	.2	.2	.0	2.7	105	6.1
	4-10	1.2	1.2	1.3	.6	1.5	.3	.5	.6	1.3	.8	1.3	1.5	2.6	1.0	1.5	1.4	.0	.0	321	18.8
	11-21	1.7	.6	1.2	.7	.6	.4	.8	.8	1.6	.9	2.2	1.8	2.9	1.9	3.4	2.3	.0	.0	406	23.7
	22+	.3	.2	.8	.1	.4	.1	.2	.2	.5	.2	.4	.3	1.1	1.2	1.6	.5	.0	.0	139	8.1
	TOTAL	63	37	63	31	48	19	31	28	59	33	68	62	119	74	114	76	0	46	971	56.7
	TOTAL	100	56	99	73	129	52	120	79	126	70	120	99	177	96	152	97	0	67	1712	100.0
	PCT	5.8	3.3	5.8	4.3	7.5	3.0	7.0	4.6	7.4	4.1	7.0	5.8	10.3	5.6	8.9	5.7	.0	3.9	100.0	

MAY

PERIOD: (PRIMARY) 1953-1969  
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET,NH >4/8),AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	7.2	1.5	2.6	11.5	23.3	10.8	5.9	1.0	.8	.3	64.9	35.1	390
06009	6.9	2.0	4.9	15.6	23.4	8.1	4.6	.3	.3	.0	66.2	33.8	346
12015	11.6	1.9	5.1	12.9	23.2	10.3	5.5	1.0	.3	.0	71.7	28.3	311
18021	9.0	1.2	3.8	13.6	25.2	8.7	2.6	.6	.0	.9	65.5	34.5	345
TOT	119	23	56	186	331	132	65	10	5	4	931	461	1392
PCT	8.5	1.7	4.0	13.4	23.8	9.5	4.7	.7	.4	.3	66.9	33.1	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	1.8	1.1	2.9	7.7	22.4	64.1	379
06009	2.6	2.0	1.7	6.6	25.7	61.3	346
12015	3.6	2.6	2.9	9.8	31.0	50.0	306
18021	2.6	1.2	3.8	9.4	20.5	62.6	342
TOT	36	23	39	114	339	822	1373
PCT	2.6	1.7	2.8	8.3	24.7	59.9	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET,NH >4/8),BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND5+	NH <5/8 AND 5+	TOTAL OBS
00003	7.4	11.9	28.8	38.5	32.7	379
06009	7.2	15.0	32.4	34.1	33.5	346
12015	12.1	20.6	37.9	35.3	26.8	306
18021	8.8	15.2	34.2	33.0	32.7	342
TOT	120	212	454	485	434	1373
PCT	8.7	15.4	33.1	35.3	31.6	100.0

MAY

PERIOD: (PRIMARY) 1953-1969  
(OVER-ALL) 1909-1969

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP													TOTAL OBS	PCT FREQ		
TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100								
55/59	.0	.0	.1	.1	.1	.2	.1	.0	7	.6						
50/54	.0	.0	.1	.0	1.0	1.0	.7	.7	41	3.3						
45/49	.0	.1	.2	.4	2.0	6.5	7.3	5.0	264	21.5						
40/44	.0	.0	.2	.6	3.0	8.3	15.9	27.7	684	55.7						
35/39	.0	.0	.0	.2	1.6	2.4	4.9	9.2	225	18.3						
30/34	.0	.0	.0	.0	.2	.2	.2	.1	8	.7						
TOTAL	0	1	6	16	97	228	358	523	1229	100.0						
PCT	.0	.1	.5	1.3	7.9	18.6	29.1	42.6								

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP												
N	NE	E	SE	S	SW	W	NW	VAR	CALM			
.1	.2	.1	.0	.0	.0	.1	.1	.0	.0			
.5	.6	.6	.1	.2	.3	.2	.3	.0	.6			
2.0	2.3	2.5	2.4	3.4	2.4	2.3	2.7	.0	1.5			
4.3	6.4	6.3	8.0	7.6	8.1	7.3	5.7	.0	2.0			
1.6	1.5	1.1	1.1	1.4	2.4	3.7	5.3	.0	.2			
.1	.1	.0	.0	.0	.0	.1	.4	.0	.0			
105	137	130	142	155	163	168	178	0	51			
8.5	11.1	10.6	11.6	12.6	13.3	13.7	14.5	.0	4.1			

TABLE 15

MEANS,EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR										
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS	
00003	57	55	51	43	37	31	28	43.5	462	
06009	52	51	49	42	37	30	27	42.0	423	
12015	53	46	45	41	35	30	28	40.5	389	
18021	54	52	47	42	36	32	30	41.9	447	
TOT	57	52	49	42	36	31	27	42.0	1721	

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR								TOTAL OBS
HOUR (GMT)	0-29	30-59	60-69	70-79	80-89	90-100	MEAN	
00003	.0	3.0	11.0	24.4	27.4	34.2	83	336
06009	.0	2.6	9.9	17.4	23.7	46.4	85	304
12015	.0	1.1	4.8	15.4	32.4	46.3	86	272
18021	.0	.6	5.6	16.1	33.1	44.6	86	323
TOT	0	23	98	229	359	526	85	1235

PERIOD: (PRIMARY) 1953-1969  
(OVER-ALL) 1909-1969

MAY

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	25	29	33	37	41	45	49	53	TOT	W FOG	WD FOG
14/16	.0	.0	.0	.0	.0	.0	.0	.1	1	.0	.1
11/13	.0	.0	.0	.0	.0	.1	.2	.4	11	.2	.6
9/10	.0	.0	.0	.0	.0	.3	.8	.1	16	.1	1.0
7/8	.0	.0	.0	.1	.1	1.3	1.2	.0	37	.1	2.7
6	.0	.0	.0	.0	.3	1.6	.3	.1	31	.2	2.1
5	.0	.0	.0	.1	1.2	3.1	.2	.0	63	.1	4.6
4	.0	.0	.0	.2	2.5	2.7	.3	.0	77	.5	5.2
3	.0	.0	.0	.3	3.7	2.6	.1	.0	89	1.0	5.7
2	.0	.0	.0	1.7	6.4	2.5	.0	.0	141	1.1	9.4
1	.0	.0	.1	1.5	6.2	1.5	.1	.0	125	.5	8.8
0	.0	.1	.1	4.5	9.2	1.2	.0	.0	201	1.1	13.9
-1	.0	.0	.0	4.2	4.6	.4	.1	.1	125	.4	8.9
-2	.0	.1	.2	5.0	4.0	.2	.0	.0	129	.6	9.0
-3	.0	.0	.8	3.1	2.3	.3	.1	.0	89	.1	6.5
-4	.0	.0	.9	2.7	1.2	.1	.0	.0	55	.3	4.6
-5	.1	.0	.7	2.0	.7	.0	.0	.0	48	.3	3.3
-6	.0	.1	.4	1.0	.7	.0	.0	.0	32	.2	2.2
-7/-8	.1	.4	.4	1.0	.4	.1	.0	.0	31	.3	2.0
-9/-10	.1	.1	.2	.1	.4	.1	.0	.0	15	.1	1.0
-11/-13	.0	.3	.1	.3	.1	.0	.0	.0	10	.0	.7
-14/-16	.1	.0	.0	.1	.0	.0	.0	.0	2	.0	.1
TOTAL	5	16	53	375	591	243	45	10	1338	100	1238
PCT	.4	1.2	4.0	28.0	44.2	18.2	3.4	.7	100.0	7.5	92.5



PERIOD: (PRIMARY) MAY  
(OVER-ALL) 1963-1969

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.2	.4	.0	.0	.0	.0	3	.4	.9	.0	.0	.0	.0	6
1-2	.0	1.1	.2	.0	.0	.0	6	.2	.9	1.5	.0	.0	.0	12
3-4	.2	.6	.9	.4	.0	.0	10	.0	.6	1.3	.6	.0	.0	12
5-6	.0	.4	2.6	.2	.2	.0	16	.0	.4	1.3	.6	.0	.0	11
7	.0	.2	.6	.2	.0	.0	5	.0	.0	.0	.2	.0	.0	1
8-9	.0	.0	.0	.2	.2	.0	2	.0	.0	.0	.2	.0	.0	1
10-11	.0	.0	.2	.0	.2	.0	2	.0	.0	.0	.0	.0	.0	0
12	.0	.0	.0	.0	.2	.0	1	.0	.0	.0	.2	.0	.0	1
13-16	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	2	13	21	5	4	0	45	3	13	19	9	0	1	45
PCT	.4	2.8	4.5	1.1	.9	.0	9.7	.6	2.8	4.1	1.9	.0	.2	9.7

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.0	.2	.0	.0	.0	.0	1	.2	.6	.0	.0	.0	.0	4
1-2	.0	2.6	.6	.0	.0	.0	15	.4	.9	.4	.0	.0	.0	8
3-4	.0	.6	1.5	.2	.0	.0	11	.0	.6	1.5	.2	.0	.0	11
5-6	.0	.2	.9	.2	.0	.0	6	.0	.0	.6	.4	.0	.0	5
7	.0	.2	.9	.4	.0	.0	7	.0	.0	.2	.2	.0	.0	2
8-9	.0	.0	.0	.4	.0	.0	2	.0	.0	.0	.0	.0	.0	0
10-11	.0	.0	.0	.2	.0	.0	1	.0	.0	.0	.4	.0	.0	2
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
13-16	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.4	.0	.0	0
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.2	.0	2
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	1
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	0	18	18	7	0	0	43	3	10	13	8	1	0	35
PCT	.0	3.9	3.9	1.5	.0	.0	9.3	.6	2.2	2.8	1.7	.2	.0	7.6

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S							SW								
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL		
<1	.0	1.1	.0	.0	.0	.0	5	.0	.6	.0	.0	.0	.0	3		
1-2	.0	.2	.2	.0	.0	.0	2	.2	1.5	.6	.0	.0	.0	11		
3-4	.0	.2	.9	.6	.0	.0	8	.0	1.1	1.1	.0	.0	.0	10		
5-6	.0	.4	.6	.4	.0	.0	7	.0	.4	2.6	.4	.0	.0	16		
7	.0	.0	.2	1.3	.0	.0	7	.0	.0	.9	.6	.0	.0	7		
8-9	.0	.0	.0	.4	.0	.2	3	.0	.0	.9	.6	.0	.0	7		
10-11	.0	.0	.0	.9	.0	.0	4	.0	.0	.2	.9	.2	.0	6		
12	.0	.0	.2	.0	.0	.0	1	.0	.0	.0	.0	.0	.0	0		
13-16	.0	.0	.0	.0	.0	.0	0	.0	.0	.2	.4	.0	.2	4		
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	3		
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
TOTAL	0	9	10	17	0	1	37	1	17	30	17	1	1	67		
PCT	.0	1.9	2.2	3.7	.0	.2	8.0	.2	3.7	6.5	3.7	.2	.2	14.5		

HGT	W										NW										TOTAL	GRAND TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL								
<1	.2	.4	.0	.0	.0	.0	3	.4	1.3	.0	.0	.0	.0	8	33							
1-2	.4	1.1	1.9	.0	.0	.0	16	.4	2.7	2.2	.0	.0	.0	20	90							
3-4	.2	1.5	2.4	.4	.0	.0	21	.0	1.1	2.8	.4	.0	.0	20	103							
5-6	.0	.9	3.2	1.3	.4	.0	27	.0	.4	3.5	.4	.0	.0	20	108							
7	.0	.0	1.5	.9	.2	.0	12	.0	.0	1.3	.4	.0	.0	8	49							
8-9	.0	.0	.6	.2	.0	.0	4	.0	.0	.0	.0	.0	.0	0	19							
10-11	.0	.0	.2	1.5	.4	.0	10	.0	.0	.2	.9	.0	.0	5	30							
12	.0	.0	.0	.4	.2	.0	3	.0	.0	.0	.2	.4	.0	3	9							
13-16	.0	.0	.0	.2	.2	.0	3	.0	.0	.0	.2	.2	.0	2	12							
17-19	.0	.0	.0	.0	.2	.0	1	.0	.0	.0	.0	.2	.0	2	5							
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.2	.2	.0	2	2							
23-25	.0	.0	.0	.0	.2	.0	1	.0	.0	.0	.0	.0	.0	0	1							
26-32	.0	.0	.0	.0	.2	.0	1	.0	.0	.0	.0	.0	.0	0	1							
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0							
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0							
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0							
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0							
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0							
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0							
TOTAL	.4	18	46	23	10	1	102	.4	21	46	13	.4	.0	88	462							
PCT	.9	3.9	10.0	5.0	2.2	.2	22.1	.9	4.5	10.0	2.8	.9	.0	19.0	100.0							

MAY

PERIOD: (PRIMARY)  
(OVER-ALL: 1963-1969

AREA 00G7 UYIMAK  
53N-COAST 157-165W

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	4.5	5.5	.0	.0	.0	.0					48
1-2	1.7	9.6	7.5	.0	.0	.0					90
3-4	.4	6.3	11.9	2.9	.0	.0					103
5-6	.0	3.1	14.3	4.0	.6	.0					108
7	.0	.4	5.5	4.2	.2	.0					49
8-9	.0	.0	1.5	2.1	.2	.2					19
10-11	.0	.0	.8	4.6	.8	.0					30
12	.0	.0	.2	1.3	.4	.6					9
13-16	.0	.0	.0	.6	.4	.0					12
17-19	.0	.0	.0	.2	.2	.0					5
20-22	.0	.0	.0	.0	.2	.0					2
23-25	.0	.0	.0	.0	.2	.0					1
26-32	.0	.0	.0	.0	.2	.0					1
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	32	119	203	99	20	4					477
PCT	6.7	24.9	42.6	20.8	4.2	.8					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.8	10.5	12.9	7.6	3.5	1.4	.3	.2	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	235	3
6-7	.0	.8	5.8	9.3	3.1	1.8	3.4	.3	.5	.2	.2	.0	.2	.0	.0	.0	.0	.0	.0	158	6
8-9	.0	.6	1.4	1.6	2.9	1.8	1.6	1.1	.6	1.1	.2	.2	.0	.0	.0	.0	.0	.0	.0	82	8
10-11	.0	.0	.2	1.0	1.0	.5	.3	.6	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	27	8
12-13	.0	.0	.5	.0	.3	.3	.5	.5	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	15	8
>13	.0	.0	.0	.0	.0	.2	.2	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4	11
INDET	15.6	.2	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100	0
TOTAL	102	75	131	121	67	37	39	17	20	8	2	1	1	0	0	0	0	0	0	621	4
PCT	16.4	12.1	21.1	19.5	10.8	6.0	6.3	2.7	3.2	1.3	.3	.2	.2	.0	.0	.0	.0	.0	.0	100.0	

JUNE

PERIOD: (PRIMARY) 1952-1969  
(OVER-ALL) 1902-1969

AREA 0007 UNIMAK  
53N=COAST 157-165W

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS	
				DRZL	FRZG PCPN	SNOW					OTHER FRZN PCPN	FOG WD PCPN	SMOKE HAZE	DUST BLWG		NO SIG WEA
N	.7	.2	.2	.0	.0	.0	.0	1.1	14	.0	.1	.2	.0	.0	3.8	64
NNE	.2	.0	.0	.0	.0	.0	.0	.2	2	.0	.0	.0	.0	.0	1.7	25
NE	1.0	.0	.4	.0	.0	.0	.0	1.3	16	.0	.9	.0	.0	.0	3.9	76
ENE	.7	.0	1.0	.0	.0	.0	.0	1.7	21	.0	.6	.0	.0	.1	2.8	65
E	.8	.0	1.0	.0	.0	.0	.0	1.7	21	.0	3.0	.0	.0	.0	6.7	141
ESE	.6	.0	.2	.0	.0	.0	.0	.7	9	.0	.9	.0	.0	.0	2.6	55
SE	.3	.0	.9	.0	.0	.0	.0	1.2	15	.0	1.5	.2	.0	.0	3.1	75
SSE	.5	.1	.6	.0	.0	.0	.0	1.0	13	.0	1.0	.0	.0	.0	1.5	44
S	.2	.0	.8	.0	.0	.0	.0	1.0	12	.0	1.9	.0	.0	.0	5.6	108
SSW	.4	.1	.2	.0	.0	.0	.0	.6	8	.0	.7	.0	.0	.0	2.7	51
SW	.2	.0	.6	.0	.0	.0	.0	.8	10	.0	.6	.3	.0	.0	4.7	80
WSW	.2	.0	.3	.0	.0	.0	.0	.5	6	.0	.2	.1	.0	.0	3.8	57
W	.1	.0	.2	.0	.0	.0	.0	.2	2	.0	1.1	.1	.0	.0	9.7	137
WNW	.1	.0	.2	.0	.0	.0	.0	.2	3	.0	.2	.0	.0	.0	4.3	59
NW	.2	.0	.2	.0	.0	.0	.0	.4	5	.0	.2	.0	.0	.0	6.0	82
NNW	.2	.0	.1	.0	.0	.0	.0	.3	4	.0	.2	.1	.1	.1	4.1	60
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
CALM	.2	.0	.2	.0	.0	.0	.0	.4	5	.0	.6	.0	.0	.0	3.9	62
TOT OBS	80	4	88	0	0	0	0		166	.0	176	15	.0	2	882	1241
TOT PCT	6.4	.3	7.1	.0	.0	.0	.0	13.4		.0	14.2	1.2	.0	.2	71.1	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	PRECIPITATION TYPE				HAIL	PCT FREQ		TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA							TOTAL OBS
			DRZL	FRZG PCPN	SNOW	UTHER FRZN PCPN		PCPN AT DB TIME	FOG			WV	PCPN	HAZE	SMOKE	DUST	NO SIG	WEA	
00003	2.8	.3	4.7	.0	.0	.0	.0	7.2	23	.0	.0	15.6	1.6	.0	.0	75.7	321		
06009	9.6	.0	5.1	.0	.0	.0	.0	14.4	48	.0	.0	13.2	1.8	.3	.0	70.4	334		
12015	7.9	.7	8.2	.0	.0	.0	.0	16.8	47	.0	.0	11.4	.4	.0	.0	71.4	280		
18021	5.8	.3	10.5	.0	.0	.0	.0	15.7	49	.0	.0	16.9	1.0	.3	.0	66.1	313		
TOT	81	4	88	0	0	0	0		167	0	0	179	15	2	885	1248			
PCT	6.5	.3	7.1	.0	.0	.0	.0	13.4		.0	.0	14.3	1.2	.2	70.9	100.0			

JUNE

PERIOD: (PRIMARY) 1952-1969  
(OVER-ALL) 1902-1969

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-3	4-10	11-21	22-33	34-47	48+	TOTAL OBS	PCT FREQ	MEAN SPD		00	03	06	09	12
N	.5	1.9	2.0	1.1	.1	.0	82	5.7	14.1		5.6	5.0	4.7	8.7	7.2
NNE	.3	.6	.8	.6	.0	.0	33	2.3	14.2		2.5	5.0	2.2	4.3	1.8
NE	.7	1.6	2.8	1.4	.1	.0	95	6.6	15.6		5.6	15.0	6.6	8.7	6.1
ENE	.5	1.3	2.2	1.0	.1	.0	74	5.1	14.9		4.8	5.0	4.7	.0	6.5
E	1.0	3.9	4.0	1.3	.3	.0	150	10.4	13.5		11.9	10.0	12.7	8.7	9.0
ESE	.1	1.2	2.3	.6	.1	.0	61	4.2	14.9		4.2	.0	4.2	.0	5.0
SE	.5	2.4	2.2	.8	.0	.0	85	5.9	12.6		5.9	.0	5.3	.0	6.1
SSE	.3	1.4	1.7	.2	.0	.0	52	3.6	12.0		2.0	.0	3.0	4.3	5.4
S	.2	3.0	3.7	1.0	.1	.0	116	8.0	13.6		8.5	.0	9.4	.0	6.5
SSW	.2	1.4	1.3	.7	.1	.0	53	3.7	14.2		4.2	5.0	4.4	.0	3.6
SW	.5	1.9	2.8	.8	.5	.0	92	6.4	14.5		7.1	.0	9.4	.0	3.6
WSW	.3	1.5	1.9	.8	.1	.0	67	4.6	14.3		4.5	5.0	3.9	.0	4.3
W	.8	5.5	4.0	1.2	.5	.0	173	12.0	13.1		14.7	25.0	8.6	39.1	11.5
WNW	.3	1.8	2.1	.7	.1	.0	72	5.0	13.6		5.1	15.0	3.9	.0	5.0
NW	.3	2.5	2.6	1.0	.1	.0	94	6.5	14.0		6.5	5.0	5.3	4.3	7.9
NNW	.6	2.1	1.9	.3	.3	.0	74	5.1	12.4		5.1	5.0	6.6	8.7	3.9
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0		.0	.0	.0	.0	.0
CALM	4.9	492	555	193	34	0	70	4.9	.0		1.7	.0	4.4	13.0	6.8
TOT OBS	169	34.1	38.5	13.4	2.4	0	1443		13.1		354	20	361	23	279
TOT PCT	11.7					0	100.0	100.0			100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD			00	03	06	09	12
N	1.9	3.3	1.9	.9	.0	115	8.0	14.1			8.2	10.0	6.9	13.0	9.0
NE	2.3	4.0	4.8	.6	.1	169	11.7	15.3			10.5	20.0	11.4	8.7	12.5
E	3.0	7.3	2.9	1.3	.1	211	14.6	13.9			16.1	10.0	16.9	8.7	14.0
SE	2.2	4.8	2.4	.1	.0	137	9.5	12.4			7.9	.0	8.9	4.3	11.5
S	2.1	6.1	2.9	.6	.1	169	11.7	13.8			12.7	5.0	13.9	.0	10.0
SW	2.1	5.6	2.4	.9	.0	159	11.0	14.4			11.6	5.0	13.3	.0	7.9
W	3.5	9.3	2.8	1.4	.1	245	17.0	13.2			19.8	40.0	12.5	39.1	16.5
NW	2.9	5.1	3.0	.6	.0	168	11.6	13.3			11.6	10.0	11.9	13.0	11.8
VAR	.0	.0	.0	.0	.0	0	.0	.0			.0	.0	.0	.0	.0
CALM	4.9	655	333	93	4	70	4.9	.0			1.7	.0	4.4	13.0	6.8
TOT OBS	358	45.4	23.1	6.4	.3	1443		13.1			354	20	361	23	279
TOT PCT	24.8					100.0	100.0				100.0	100.0	100.0	100.0	100.0

JUNE

PERIOD: (PRIMARY) 1952-1969  
(OVER-ALL) 1902-1969

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	1-3	4-10	11-21	WIND SPEED (KNOTS)			CALM	MEAN	PCT FREQ	TOTAL OBS
				22-33	34-47	48+				
00003	5.3	32.4	43.6	15.0	2.1	.0	1.6	14.0	100.0	374
06009	6.0	36.5	36.7	12.0	3.9	.0	4.9	13.2	100.0	384
12015	6.5	34.5	38.1	12.4	1.6	.0	6.8	12.6	100.0	307
18021	9.5	33.1	35.4	14.0	1.6	.0	6.3	12.6	100.0	378
TOT	99	492	555	193	34	0	70	13.1		1443
PCT	6.9	34.1	38.5	13.4	2.4	.0	4.9		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	.6	1.0	1.4	1.7	50	5.7
NNE	.2	.0	.8	1.0	22	6.5
NE	.5	.2	.7	4.8	67	7.2
ENE	.0	.3	.5	4.3	55	7.7
E	.6	.4	1.6	8.3	117	7.3
ESE	.1	.2	.1	3.6	43	7.6
SE	.1	.3	.6	5.2	66	7.6
SSE	.0	.0	.8	2.6	37	7.7
S	.2	.3	1.7	6.4	92	7.5
SSW	.3	.1	.5	3.2	44	7.2
SW	.6	.2	1.9	3.7	70	6.7
WSW	.4	.4	1.3	3.0	55	6.7
W	1.8	.9	3.5	6.2	134	6.3
WNW	.9	.7	1.7	2.2	60	5.7
NW	1.1	1.1	2.2	2.4	74	5.6
NNW	.5	.6	1.5	1.7	46	6.1
VAR	.0	.0	.0	.0	0	.0
CALM	.6	.7	1.5	2.0	53	5.9
TOT OBS	90	80	280	675	1085	6.7
TOT PCT	8.3	7.4	22.1	62.2	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	PERCENTAGE FREQUENCY OF NH <5/8												TOTAL OBS
	000	149	150	299	300	599	600	999	1000	2000	3499	3500	
N	.1	.2	.2	.0	.0	.7	.8	.4	.4	.4	.4	.4	50
NNE	.1	.0	.0	.0	.1	.6	.6	.6	.6	.6	.6	.6	22
NE	1.0	.1	.1	.2	1.0	2.1	2.1	.1	.1	.1	.1	.1	67
ENE	1.1	.1	.1	.7	1.0	1.1	1.1	.0	.0	.0	.0	.0	55
E	2.9	.2	.2	.8	1.1	2.8	2.8	.5	.0	.1	.1	.1	117
ESE	.7	.1	.1	.1	1.2	.7	.3	.1	.0	.0	.0	.0	43
SE	1.4	.0	.0	.4	1.3	1.7	.6	.0	.0	.0	.0	.0	66
SSE	.5	.0	.0	.1	.8	1.3	.3	.0	.0	.1	.1	.1	37
S	1.4	.1	.1	.7	1.4	1.8	1.9	.1	.0	.0	.0	.0	92
SSW	.6	.0	.0	.1	1.0	1.0	.4	.1	.0	.0	.0	.0	44
SW	.4	.0	.0	.1	.8	2.1	.6	.6	.1	.0	.0	.0	70
WSW	.1	.1	.1	.4	.6	1.8	.5	.2	.1	.1	.1	.1	55
W	.7	.2	.2	.4	.7	3.1	1.9	.4	.0	.2	.2	.2	134
WNW	.3	.0	.0	.1	.6	1.0	.7	.3	.0	.0	.0	.0	60
NW	.1	.0	.0	.5	.6	1.5	1.1	.1	.1	.1	.1	.1	74
NNW	.3	.1	.1	.1	.8	.6	.6	.1	.0	.0	.0	.0	46
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.6	.1	.1	.1	.7	.6	.9	.2	.1	.0	.0	.0	53
TOT OBS	133	13	13	51	160	268	136	34	7	.6	.6	.6	1085
TOT PCT	12.3	1.2	1.2	4.7	14.7	24.7	12.5	3.1	.6	.7	.7	.7	100.0

PERIOD: (PRIMARY) 1952-1969  
(OVER-ALL) 1902-1969

JUNE

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)									
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0		
= OR >6500	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
= OR >5000	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
= OR >3500	4.2	5.0	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
= OR >2000	12.2	16.5	17.5	17.8	17.8	17.9	17.9	17.9	17.9	17.9
= OR >1000	27.2	37.3	41.4	42.2	42.4	42.6	42.7	42.7	42.7	42.7
= OR >600	34.9	49.3	55.6	56.6	57.0	57.4	57.6	57.6	57.6	57.6
= OR >300	37.0	53.1	60.0	61.4	61.7	62.1	62.3	62.3	62.3	62.3
= OR >150	37.2	53.7	60.9	62.4	62.8	63.2	63.4	63.4	63.4	63.4
= OR > 0	37.3	54.7	64.5	67.3	69.4	72.6	74.8	75.0	75.0	75.0
TOTAL	403	590	696	726	749	783	807	809	809	809

TOTAL NUMBER OF OBS: 1079

PCT FREQ NH <5/8: 25.0

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

										TOTAL OBS
0	1	2	3	4	5	6	7	8	DBSCD	
4.8	3.9	5.8	6.0	4.0	4.5	9.2	10.0	40.8	10.9	11.5

JUNE

PERIOD: (PRIMARY) 1952-1969  
(OVER-ALL) 1902-1969

AREA 000/ UNIMAK  
53N-COAST 157-165W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.0	.0	.1	.1	.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	5	.4
ND PCP	.1	.1	.2	.2	1.4	.4	.8	.5	.3	.2	.1	.1	.6	.1	.1	.1	.0	.3	66	5.4
TOTAL	1	1	3	3	17	6	11	6	4	2	1	1	7	1	1	1	0	5	71	5.8
PCP	.0	.0	.0	.1	.2	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	5	.4
ND PCP	.0	.0	.1	.1	.4	.2	.2	.0	.5	.2	.1	.0	.2	.0	.1	.1	.0	.0	25	2.0
TOTAL	0	0	1	2	7	2	4	0	6	3	1	0	2	0	1	1	0	0	30	2.4
PCP	.2	.0	.0	.4	.2	.0	.2	.1	.1	.0	.0	.0	.0	.0	.1	.0	.0	.1	15	1.2
ND PCP	.0	.2	.4	.1	.2	.0	.0	.2	.2	.2	.2	.1	.2	.1	.1	.0	.0	.2	29	2.4
TOTAL	2	2	5	6	5	0	2	3	3	3	2	1	3	1	2	0	0	4	44	3.6
PCP	.0	.0	.4	.2	.7	.2	.2	.5	.7	.3	.2	.1	.2	.0	.2	.1	.0	.1	51	4.1
ND PCP	.2	.2	.2	.7	1.2	.5	.3	.2	1.3	.2	.7	.2	.5	.1	.1	.2	.0	.2	85	6.9
TOTAL	2	2	8	11	24	9	7	9	24	7	10	3	8	1	4	4	0	3	136	11.1
PCP	.8	.1	.6	.7	.3	.3	.5	.4	.2	.1	.5	.4	.0	.2	.0	.2	.0	.2	66	5.4
ND PCP	.7	.2	1.2	.6	2.7	.7	1.0	.6	2.0	.4	1.1	1.1	2.1	.5	.8	.6	.0	.5	206	16.7
TOTAL	18	4	22	16	37	13	18	12	26	6	20	19	26	8	10	9	0	6	272	22.1
PCP	.2	.1	.2	.2	.3	.1	.1	.1	.1	.2	.2	.0	.0	.1	.1	.1	.0	.0	24	2.0
ND PCP	3.2	1.2	2.7	2.0	3.6	1.9	2.5	1.0	3.5	2.1	3.6	2.7	7.3	3.8	5.1	3.6	.0	3.4	653	53.1
TOTAL	41	16	36	26	48	24	32	13	44	29	46	33	90	48	64	45	0	42	677	55.0
TOTAL	64	25	75	64	138	54	74	43	107	50	80	57	136	59	82	60	0	62	1230	100.0
PCT	5.2	2.0	6.1	5.2	11.2	4.4	6.0	3.5	8.7	4.1	6.5	4.6	11.1	4.8	6.7	4.9	.0	5.0	100.0	



JUNE

PERIOD: (PRIMARY) 1952-1969  
(OVER-ALL) 1902-1969

AREA 0007 UNIMAK  
53N=COAST 157-165W

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.1	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0	.1	.0	.0	.0	.0	.4	10	.7
	4-10	.0	.1	.1	.1	.5	.2	.3	.0	.1	.0	.1	.0	.1	.1	.1	.0	.0	.0	23	1.6
	11-21	.0	.0	.1	.1	.4	.1	.4	.3	.3	.1	.0	.0	.3	.0	.0	.1	.0	.0	31	2.2
	22+	.0	.0	.1	.1	.1	.1	.1	.1	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	9	.6
	TOTAL	1	1	4	3	17	6	11	6	5	2	1	1	7	1	1	1	0	5	73	5.2
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	1	.1
	4-10	.0	.0	.1	.0	.0	.1	.0	.0	.2	.0	.0	.0	.1	.0	.1	.0	.0	.0	7	.5
	11-21	.0	.0	.0	.1	.5	.1	.1	.0	.2	.1	.0	.0	.1	.0	.0	.1	.0	.0	19	1.3
	22+	.0	.0	.0	.1	.0	.0	.2	.0	.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	6	.4
	TOTAL	0	0	1	3	7	3	4	0	6	3	1	0	2	0	1	2	0	0	33	2.3
1<2	0-3	.2	.0	.1	.0	.1	.0	.0	.0	.0	.0	.1	.0	.1	.0	.0	.1	.0	.3	12	.8
	4-10	.0	.0	.1	.0	.3	.0	.1	.1	.1	.1	.1	.0	.1	.0	.0	.0	.0	.0	15	1.1
	11-21	.0	.1	.1	.4	.1	.0	.0	.1	.1	.0	.0	.1	.1	.1	.1	.0	.0	.0	17	1.2
	22+	.0	.0	.1	.1	.0	.0	.1	.1	.1	.1	.0	.0	.0	.0	.1	.0	.0	.0	6	.4
	TOTAL	3	2	6	6	6	0	2	3	3	3	3	1	4	1	2	1	0	4	50	3.5
2<5	0-3	.1	.0	.0	.1	.1	.0	.0	.1	.1	.0	.0	.1	.0	.0	.1	.0	.0	.2	11	.8
	4-10	.1	.0	.1	.1	.1	.1	.2	.0	.4	.0	.1	.0	.1	.0	.1	.1	.0	.0	21	1.5
	11-21	.1	.1	.4	.4	.6	.4	.3	.5	1.0	.3	.4	.1	.3	.1	.1	.1	.0	.0	71	5.0
	22+	.0	.1	.4	.4	1.0	.3	.0	.1	.4	.2	.2	.1	.1	.0	.0	.1	.0	.0	46	3.3
	TOTAL	4	2	11	13	25	10	7	10	26	7	10	4	8	1	4	4	0	3	149	10.5
5<10	0-3	.1	.1	.2	.1	.4	.1	.2	.0	.0	.1	.1	.1	.1	.1	.1	.1	.0	1.1	42	3.0
	4-10	.5	.1	.1	.4	1.2	.1	.6	.4	.6	.2	.2	.6	1.1	.4	.1	.2	.0	.0	96	6.8
	11-21	.4	.1	.8	.5	.9	.6	.6	.4	.9	.1	.8	.5	.7	.1	.4	.4	.0	.0	117	8.3
	22+	.6	.2	.6	.4	.3	.3	.2	.1	.4	.1	.4	.4	.3	.1	.1	.1	.0	.0	65	4.6
	TOTAL	22	7	25	19	40	15	22	12	28	8	22	22	30	11	11	11	0	15	320	22.6
10+	0-3	.1	.2	.4	.3	.3	.0	.3	.1	.1	.1	.3	.1	.6	.1	.1	.1	.0	3.0	89	6.3
	4-10	1.4	.5	1.1	.8	1.9	.7	1.3	.8	1.6	1.0	1.4	.8	3.9	1.3	1.8	1.8	.0	.0	316	22.4
	11-21	1.6	.5	1.4	.8	1.3	1.1	.9	.5	1.3	.6	1.6	1.2	2.5	1.8	2.1	1.4	.0	.0	289	20.5
	22+	.6	.3	.4	.1	.2	.1	.1	.0	.2	.3	.6	.4	1.3	.6	.9	.4	.0	.0	94	6.7
	TOTAL	52	21	47	29	52	26	38	20	46	29	55	37	116	54	70	53	0	43	788	55.8
	TOTAL	82	33	94	73	147	60	84	51	114	52	92	65	167	68	89	72	0	70	1413	100.0
	PCT	5.8	2.3	6.7	5.2	10.4	4.2	5.9	3.6	8.1	3.7	6.5	4.6	11.8	4.8	6.3	5.1	.0	5.0	100.0	

JUNE

PERIOD: (PRIMARY) 1952-1969  
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET,NH >4/8),AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	PERCENT FREQUENCY OF CEILING HEIGHTS (FEET,NH >4/8),AND OCCURRENCE OF NH <5/8 BY HOUR												TOTAL NH <5/8 ANY HGT OBS
	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL		
00003	9.0	1.4	5.5	12.1	23.1	12.8	4.5	1.0	.7	1.0	71.0	29.0	290
06009	11.6	.0	4.1	15.0	23.9	14.0	2.4	.0	.3	.3	71.7	28.3	293
12015	14.1	2.1	5.6	14.1	26.9	10.3	1.7	.4	1.3	.9	77.4	22.6	234
18021	14.7	1.4	3.5	16.8	23.9	12.6	3.5	1.1	.4	.7	78.6	21.4	285
TOT	135	13	51	160	268	138	34	7	7	8	821	281	1102
PCT	12.3	1.2	4.6	14.5	24.3	12.5	3.1	.6	.6	.7	74.5	25.5	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	PERCENT FREQUENCY VSBY (NM) BY HOUR										TOTAL OBS
	<1/2	1/2<1	1<2	2<5	5<10	10+					
00003	3.9	1.8	3.2	9.9	15.6	65.6	282				282
06009	6.6	1.7	4.2	5.9	18.3	63.3	289				289
12015	5.2	2.2	2.2	12.2	26.1	52.2	230				230
18021	6.5	2.9	2.2	12.6	20.1	55.8	278				278
TOT	60	23	32	108	213	643	1079				1079
PCT	5.6	2.1	3.0	10.0	19.7	59.6	100.0				100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET,NH >4/8),BY HOUR

HOUR (GMT)	CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR CEILING HGT (FEET,NH >4/8),BY HOUR					TOTAL OBS
	<150 <50YD	<600 <1	<1000 <5	1000+ AND5+	NH <5/8 AND 5+	
00003	7.8	15.6	33.3	38.3	28.4	282
06009	11.4	15.9	34.6	37.7	27.7	289
12015	13.9	21.7	42.2	36.1	21.7	230
18021	14.0	20.9	42.8	37.1	20.1	278
TOT	126	198	410	403	266	1079
PCT	11.7	18.4	38.0	37.3	24.7	100.0

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PERIOD: (PRIMARY) 1952-1969  
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TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP												
TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ	TOTAL	
60/64	.0	.0	.0	.1	.1	.2	.0	.0	4	.4	4	
55/59	.0	.0	.1	.0	.7	1.3	.5	.0	26	2.5	26	
50/54	.0	.0	.0	.0	.9	3.7	8.6	2.2	159	15.5	159	
45/49	.0	.0	.0	.0	.5	8.6	18.6	29.3	586	56.9	586	
40/44	.0	.0	.0	.0	.2	1.7	6.4	16.2	252	24.5	252	
35/39	.0	.0	.0	.0	.0	.1	.0	.1	2	.2	2	
TOTAL	0	0	1	1	24	159	351	493	1029	100.0	1029	
PCT	.0	.0	.1	.1	2.3	15.5	34.1	47.9				

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP										
	N	NE	E	SE	S	SW	W	NW	VAR	CALM
60/64	.0	.1	.1	.0	.0	.1	.1	.0	.0	.0
55/59	.2	.3	.4	.2	.2	.3	.5	.3	.0	.2
50/54	1.7	1.7	3.0	1.3	1.1	1.7	2.8	1.6	.0	.6
45/49	4.2	8.2	7.5	5.3	6.8	6.9	9.7	6.2	.0	2.1
40/44	2.1	2.5	4.2	2.3	3.1	3.1	3.3	2.9	.0	.9
35/39	.0	.0	.0	.0	.0	.1	.0	.1	.0	.0
TOTAL	8.5	13.2	15.6	9.4	11.5	12.5	16.9	11.4	0	3.9
PCT	8.3	12.8	15.2	9.1	11.2	12.1	16.4	11.1	.0	3.8

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR										
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS	
00003	61	58	55	48	42	40	39	47.9	369	
06009	61	55	52	46	41	40	38	46.6	381	
12015	56	52	49	45	41	38	38	45.0	303	
18021	60	58	52	46	41	39	37	46.1	374	
TOT	61	57	53	46	41	39	37	46.5	1427	

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR										
HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS		
00003	.0	.4	4.0	20.7	38.5	36.4	86	275		
06009	.0	.4	3.2	13.7	35.6	47.2	88	284		
12015	.0	.0	.5	10.0	28.0	61.6	90	211		
18021	.0	.0	1.2	16.2	32.8	49.8	88	259		
TOT	0	2	24	159	351	493	88	1029		

PERIOD: (PRIMARY) 1952-1969  
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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	37	40	41	44	45	48	49	52	53	56	57	61	64	TOT	W FOG	WD FOG
14/16	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.1	.0	.0	2	.0	.2
11/13	.0	.0	.1	.1	.1	.0	.0	.0	.4	.0	.0	.2	.0	8	.1	.6
9/10	.0	.0	.2	.1	.1	.6	.0	.0	.9	.2	.0	.0	.0	21	.0	1.9
7/8	.0	.0	.0	.0	.9	1.2	.7	.1	.0	.1	.0	.0	.0	32	.6	2.4
6	.0	.0	.0	.0	.2	1.0	.5	.1	.0	.1	.0	.0	.0	19	.3	1.5
5	.0	.0	.6	.0	2.2	2.2	.4	.1	.0	.1	.0	.0	.0	60	.6	4.9
4	.0	.0	.6	.0	4.0	2.6	.2	.0	.0	.0	.0	.0	.0	80	1.4	6.0
3	.0	.0	1.2	.0	4.3	2.0	.3	.0	.0	.0	.0	.0	.0	84	.7	7.0
2	.0	.0	2.2	.0	7.5	2.1	.1	.0	.0	.0	.0	.0	.0	129	1.9	10.0
1	.4	.0	3.1	.0	8.4	1.5	.0	.0	.0	.0	.0	.0	.0	145	1.9	11.5
0	.4	.4	3.7	.0	9.3	1.7	.0	.0	.0	.0	.0	.0	.0	163	2.2	12.8
-1	.1	.1	2.3	.0	5.9	.6	.0	.0	.0	.0	.0	.0	.0	97	1.2	7.8
-2	.1	.1	4.2	.0	3.9	.3	.0	.0	.0	.0	.0	.0	.0	91	1.2	7.2
-3	.3	.3	2.5	.0	2.0	.0	.0	.0	.0	.0	.0	.0	.0	52	.6	4.3
-4	.3	.3	1.7	.0	1.9	.0	.0	.0	.0	.0	.0	.0	.0	42	.4	3.5
-5	.3	.3	1.5	.0	1.0	.0	.0	.0	.0	.0	.0	.0	.0	30	.4	2.4
-6	.2	.2	.6	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	12	.2	.9
-7/-8	.2	.2	.3	.0	.2	.1	.0	.0	.0	.0	.0	.0	.0	8	.2	.6
-9/-10	.0	.0	.1	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	4	.0	.4
-11/-13	.0	.0	.1	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	3	.1	.2
TOTAL	23	270	571	172	38	3.5	1082	151	931	86.0						
PCT	2.1	25.0	52.8	15.9	3.5	.6										

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N							NE							TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+		
<1	.2	.4	.0	.0	.0	.0	3	.4	.9	.0	.0	.0	.0	6	
1-2	.0	.7	.4	.0	.0	.0	5	.0	.9	.9	.0	.0	.0	8	
3-4	.0	.0	1.1	.0	.0	.0	5	.2	.9	2.2	.7	.0	.0	18	
5-6	.0	.0	.2	.2	.0	.0	2	.0	.2	1.1	.7	.0	.0	9	
7	.0	.0	.2	.4	.0	.0	3	.0	.0	.0	1.1	.0	.0	5	
8-9	.0	.0	.2	.0	.0	.0	1	.0	.0	.7	.2	.0	.0	4	
10-11	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.2	.0	.0	1	
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
13-16	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.7	.0	.0	3	
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
TOTAL	1	5	10	3	0	0	19	3	13	22	16	0	0	54	
PCT	.2	1.1	2.2	.7	.0	.0	4.1	.7	2.8	4.8	3.5	.0	.0	11.7	

HGT	E										SE				TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	
<1	.4	.7	.0	.0	.0	.0	5	.2	.7	.0	.0	.0	.0	4	
1-2	.2	3.3	3.3	.0	.0	.0	31	.0	1.7	1.7	.0	.0	.0	16	
3-4	.0	.4	3.9	.4	.0	.0	22	.2	.7	2.4	.2	.0	.0	16	
5-6	.0	.9	1.7	.9	.0	.0	16	.0	.2	1.3	.0	.0	.0	7	
7	.0	.0	1.1	1.1	.0	.0	10	.0	.0	.4	.2	.0	.0	3	
8-9	.0	.0	.2	.7	.0	.0	4	.0	.0	.0	.2	.0	.0	1	
10-11	.0	.0	.2	.2	.0	.0	2	.0	.0	.0	.2	.0	.0	1	
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
13-16	.0	.0	.0	.4	.0	.0	2	.0	.0	.0	.0	.0	.0	0	
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
TOTAL	3	24	48	17	0	0	92	2	15	27	4	0	0	48	
PCT	.7	5.2	10.4	3.7	.0	.0	20.0	.4	3.3	5.9	.9	.0	.0	10.4	

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S							SW							TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	
<1	.0	.9	.0	.0	.0	.0	4	.2	.9	.0	.0	.0	.0	5	
1-2	.0	2.6	1.3	.0	.0	.0	18	.2	.9	2.2	.0	.0	.0	15	
3-4	.0	1.3	2.2	.0	.0	.0	16	.0	1.3	1.1	.2	.0	.0	12	
5-6	.0	.2	2.0	.7	.0	.0	13	.0	.2	2.4	.4	.0	.0	14	
7	.0	.0	1.1	.2	.0	.0	6	.0	.4	.7	.2	.0	.0	6	
8-9	.0	.2	.2	.2	.0	.0	3	.0	.0	.2	.2	.0	.0	2	
10-11	.0	.0	.0	.4	.0	.0	2	.0	.0	.2	.2	.0	.0	2	
12	.0	.0	.2	.0	.0	.0	1	.0	.0	.0	.4	.0	.0	2	
13-16	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
TOTAL	0	24	32	7	0	0	63	2	17	31	8	0	0	58	
PCT	.0	5.2	7.0	1.5	.0	.0	13.7	.4	3.7	6.7	1.7	.0	.0	12.6	

HGT	W							NW							TOTAL	GRAND TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL		
<1	.9	1.3	.0	.0	.0	.0	10	.0	.9	.0	.0	.0	.0	4	41	
1-2	.0	3.5	2.4	.0	.0	.0	27	.0	2.0	.7	.0	.0	.0	12	132	
3-4	.0	1.7	2.6	.2	.0	.0	21	.0	.4	2.4	.0	.0	.0	13	123	
5-6	.0	.7	2.2	.0	.0	.0	13	.0	.4	.9	.4	.0	.0	8	82	
7	.0	.0	.4	.9	.2	.0	7	.0	.0	.7	.7	.0	.0	5	46	
8-9	.0	.0	.4	.0	.0	.0	2	.0	.0	.4	.0	.0	.0	2	19	
10-11	.0	.0	.0	.2	.0	.0	1	.0	.0	.0	.0	.0	.0	0	9	
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	3	
13-16	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	5	
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0	
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0	
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0	
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0	
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0	
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0	
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0	
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0	
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0	
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0	
TOTAL	4	33	37	6	1	0	81	0	17	23	5	0	0	45	460	
PCT	.9	7.2	8.0	1.3	.2	.0	17.6	.0	3.7	5.0	1.1	.0	.0	9.8	100.0	

JUNE

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1969

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	7.4	6.2	.0	.0	.0	.0					66
1-2	.8	14.6	12.1	.0	.0	.0					134
3-4	.4	6.4	16.8	1.6	.0	.0					123
5-6	.0	2.7	11.1	3.1	.0	.0					82
7	.0	.4	4.3	4.5	.2	.0					46
8-9	.0	.2	2.3	1.4	.0	.0					19
10-11	.0	.0	.4	1.4	.0	.0					9
12	.0	.0	.2	.4	.0	.0					3
13-16	.0	.0	.0	1.0	.0	.0					5
17-19	.0	.0	.0	.0	.0	.0					0
20-22	.0	.0	.0	.0	.0	.0					0
23-25	.0	.0	.0	.0	.0	.0					0
26-32	.0	.0	.0	.0	.0	.0					0
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	42	148	230	66	1	0					487
PCT	8.6	30.4	47.2	13.6	.2	.0					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.7	13.1	12.8	7.1	2.4	1.2	.7	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	228	3
6-7	.0	2.9	4.8	8.4	5.0	1.7	1.0	.3	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	142	5
8-9	.0	.7	1.7	4.8	4.7	2.9	1.0	.3	1.6	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	104	6
10-11	.0	.0	.3	.7	.3	.9	.3	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	17	7
12-13	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2	5
>13	.0	.0	.0	.0	.2	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2	11
INDET	14.0	.3	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	85	0
TOTAL	91	99	116	124	73	39	18	6	13	1	0	0	0	0	0	0	0	0	0	580	4
PCT	15.7	17.1	20.0	21.4	12.6	6.7	3.1	1.0	2.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

JULY

PERIOD: (PRIMARY) 1955-1969  
(OVER-ALL) 1910-1969

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	PRECIPITATION TYPE				HAIL	PCT FREQ		TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
			DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN		OB TIME	AT PCPN			PCPN	FOG	SMOKE	DUST	SIG	
N	.0	.0	.2	.0	.0	.0	.0	.2	.4	4	.0	.5	.0	.0	.0	3.7	84
NNE	.1	.0	.2	.0	.0	.0	.0	.3	5	5	.0	.3	.1	.0	.0	1.4	37
NE	.1	.0	.3	.0	.0	.0	.0	.4	7	7	.0	.6	.0	.0	.0	2.3	61
ENE	.2	.0	.4	.0	.0	.0	.0	.5	10	10	.0	.5	.0	.0	.0	1.6	50
E	.4	.1	.6	.0	.0	.0	.0	1.1	20	20	.0	1.1	.0	.0	.0	2.7	92
ESE	.3	.1	.3	.0	.0	.0	.0	.6	12	12	.0	.1	.2	.0	.2	1.4	45
SE	.4	.0	.4	.0	.0	.0	.0	.7	14	14	.0	.7	.1	.0	.0	1.4	56
SSE	.6	.0	.8	.0	.0	.0	.0	1.4	26	26	.0	.7	.0	.0	.0	1.4	66
S	1.3	.1	.9	.0	.0	.0	.0	2.2	42	42	.0	2.4	.2	.0	.0	3.4	155
SSW	.4	.0	1.2	.0	.0	.0	.0	1.5	28	28	.0	1.8	.2	.0	.0	3.4	130
SW	.6	.0	1.2	.0	.0	.0	.0	1.7	32	32	.0	2.8	.1	.0	.0	6.0	200
WSW	.5	.0	.6	.0	.0	.0	.0	1.1	20	20	.0	2.4	.1	.0	.0	7.0	200
W	.2	.2	.7	.0	.0	.0	.0	.9	18	18	.0	2.2	.0	.0	.1	11.9	287
WNW	.1	.1	.3	.0	.0	.0	.0	.5	9	9	.0	.8	.1	.0	.0	7.6	170
NW	.2	.2	.2	.0	.0	.0	.0	.5	10	10	.0	.4	.1	.0	.0	5.2	119
NNW	.1	.1	.0	.0	.0	.0	.0	.1	2	2	.0	.5	.0	.0	.0	3.1	70
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	0	.0	.0	.0	.0	.0	.0	0
CALM	.1	.0	.1	.0	.0	.0	.0	.2	3	3	.0	.7	.0	.0	.0	3.2	77
TOT OBS	106	12	154	0	0	0	0		262	262	0	350	19	.0	.4	1264	1899
TOT PCT	5.6	.6	8.1	.0	.0	.0	.0	13.8			.0	18.4	1.0	.0	.2	66.6	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	PRECIPITATION TYPE				HAIL	PCT FREQ		TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
			DRZL	FRZG PCPN	SNOW	OTHER FRZN PCPN		OB TIME	AT PCPN			PCPN	FOG	SMOKE	DUST	SIG	
00003	5.0	1.2	5.0	.0	.0	.0	.0	11.2	54	54	.0	17.3	1.0	.0	.0	70.5	481
06009	6.0	.2	6.9	.0	.0	.0	.0	12.7	61	61	.0	22.9	.8	.0	.2	63.3	480
12015	6.4	.6	10.9	.0	.0	.0	.0	16.7	78	78	.0	14.8	.6	.0	.4	67.4	466
18021	4.8	.4	9.6	.0	.0	.0	.0	14.4	69	69	.0	19.2	1.5	.0	.2	64.8	480
TOT	106	12	154	0	0	0	0		262	262	0	354	19	.0	.4	1268	1907
PCT	5.6	.6	8.1	.0	.0	.0	.0	13.7			.0	18.6	1.0	.0	.2	66.5	100.0



JULY

PERIOD: (PRIMARY) 1955-1969  
(OVER-ALL) 1910-1969

AREA 0007 UNIMAK  
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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-3	4-10	11-21	22-33	34-47	48+	00	03	06	09				12	15	18	21	
N	.3	2.2	2.0	.4	.0	.0	3.0	10.9	5.8	4.0	3.9	2.6	5.5	9.4				
NNE	*	1.6	1.4	.3	.0	.0	3.9	5.9	3.0	2.0	2.4	8.7	2.6	1.6				
NE	.4	1.7	1.6	.3	.0	.0	3.4	5.9	2.4	10.1	3.5	8.7	3.8	6.3				
ENE	.2	1.1	1.4	.1	*	.0	2.2	5.9	2.8	2.0	1.9	4.3	2.5	5.5				
E	.2	1.7	2.2	.5	*	.0	4.8	1.0	5.5	4.0	5.2	1.7	4.3	3.9				
ESE	.0	.8	1.0	.2	*	.0	2.4	.0	2.8	.0	1.3	.9	2.8	.0				
SE	.4	1.4	1.0	.2	.0	.0	3.4	1.0	3.4	.0	3.2	4.3	2.6	2.3				
SSE	.3	.8	1.6	.3	.0	.0	2.8	3.0	2.3	2.0	2.8	4.3	3.8	3.1				
S	.6	2.5	3.2	.7	*	.0	7.4	1.0	8.5	12.1	8.0	1.7	6.4	5.5				
SSW	.2	2.0	2.9	.6	.1	.0	6.3	3.0	7.5	1.0	5.2	3.5	5.8	7.0				
SW	.9	3.2	4.6	1.1	.1	.0	10.2	4.0	11.3	9.1	9.5	9.6	11.3	3.1				
WSW	.4	3.2	5.4	1.0	.1	.0	11.9	16.8	9.2	7.1	11.0	2.6	8.9	12.5				
W	.5	5.6	7.1	1.0	.2	.0	16.6	13.9	13.5	10.1	17.1	9.6	13.8	10.2				
WNW	.2	3.7	4.5	1.6	.2	.0	8.6	17.8	7.9	22.2	8.6	13.0	11.3	10.2				
NW	.6	2.3	4.1	.9	*	.0	7.3	6.9	7.3	9.1	6.9	13.9	7.4	12.5				
NNW	.2	1.8	1.6	.2	.0	.0	2.4	2.0	2.3	4.0	5.2	9.6	4.0	6.3				
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0				
CALM	3.3	889	1140	234	21	0	3.4	1.0	4.5	1.0	4.3	.9	3.2	.8				
TOT OBS	221	35.5	45.5	9.3	.8	.0	537	101	532	99	463	115	530	128				
TOT PCT	8.8					.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0				

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-6	7-16	17-27	28-40	41+				00	03	06	09	12	15	18	21
N	1.8	4.9	1.5	*	.0	206	8.2	11.6	6.9	16.8	8.8	6.1	6.3	11.3	8.1	10.9
NE	2.0	3.5	1.1	.2	.0	170	6.8	11.6	5.6	11.9	5.3	12.1	5.4	13.0	6.2	11.7
E	1.3	3.6	1.4	.2	.0	164	6.5	13.1	7.3	1.0	8.3	4.0	6.5	2.6	7.2	3.9
SE	1.5	3.2	1.0	.2	.0	148	5.9	11.8	6.1	4.0	5.6	2.0	6.0	8.7	6.4	5.5
S	2.0	7.0	3.7	.3	.0	324	12.9	13.4	13.8	4.0	16.0	13.1	13.2	5.2	12.3	12.5
SW	3.6	11.0	4.8	.7	.0	501	20.0	13.3	22.2	20.8	20.5	16.2	20.5	12.2	20.2	15.6
W	3.2	14.5	5.9	1.0	*	617	24.6	13.7	25.1	31.7	21.4	32.3	25.7	22.6	25.1	20.3
NW	2.2	6.1	3.2	.2	.0	292	11.7	13.0	9.7	8.9	9.6	13.1	12.1	23.5	11.3	18.8
VAR	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	3.3	1348	565	70	1	83	3.3	.0	3.4	1.0	4.5	1.0	4.3	.9	3.2	.8
TOT OBS	521	53.8	22.6	2.8	*	2505	100.0	12.6	537	101	532	99	463	115	530	128
TOT PCT	20.8				*		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

JULY

PERIOD: (PRIMARY) 1955-1969  
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TABLE 4

HOUR	PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)									
	1-3	4-10	11-21	22-33	34-47	48+	CALM	MEAN	PCT FREQ	TOTAL OBS
00003	5.0	35.3	44.8	10.7	1.3	.0	3.0	13.0	100.0	638
06009	5.9	34.2	46.4	8.6	.0	.0	4.0	12.5	100.0	631
12015	4.2	33.9	49.5	8.5	.3	.0	3.6	12.7	100.0	578
18021	6.8	38.3	41.8	9.6	.8	.0	2.7	12.2	100.0	658
TOT	138	889	1140	234	21	0	83	12.6		2505
PCT	5.5	35.5	45.5	9.3	.8	.0	3.3		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION							MEAN CLOUD COVER
	0-2	3-4	5-7	8-8	OBSCD	TOTAL OBS		
N	.8	.5	1.4	2.6		94	6.1	
NNE	.5	.1	1.0	1.4		53	6.2	
NE	.3	.2	.5	2.5		61	6.9	
ENE	.2	.1	.8	1.7		51	7.0	
E	.2	.0	.6	4.0		85	7.5	
ESE	.0	.1	.3	1.6		36	7.4	
SE	.1	.1	.3	2.1		44	7.6	
SSE	.1	.0	.4	2.3		49	7.7	
S	.2	.1	.5	5.0		101	7.6	
SSW	.1	.1	.6	5.1		104	7.6	
SW	.4	.2	1.0	7.7		166	7.4	
WSW	.3	.6	1.9	7.4		180	7.3	
W	1.8	1.4	4.1	7.9		269	6.3	
WNW	2.2	1.8	3.1	3.7		192	5.4	
NW	1.8	.6	2.5	2.9		139	5.5	
NNW	1.1	.2	1.7	1.4		78	5.2	
VAR	.0	.0	.0	.0		0	.0	
CALM	1.0	.3	.8	1.9		72	5.5	
TOT OBS	136	110	380	1088		1774	6.6	
TOT PCT	11.0	6.2	21.4	61.3		100.0		

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)													
AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION													
WIND DIR	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8 ANY HGT	TOTAL	OBS
	149	299	599	999	1999	3499	4999	6499	7999				
N	.3	.1	.1	.6	1.4	.7	.1	.0	.1	.0	1.9	94	
NNE	.1	.0	.1	.2	.7	.6	.1	.1	.0	.0	1.1	53	
NE	.1	.0	.3	.2	1.1	.7	.2	.0	.0	.0	.7	61	
ENE	.2	.1	.2	.3	.6	.5	.2	.0	.0	.1	.7	51	
E	.7	.1	.2	.9	.8	1.0	.1	.1	.0	.0	.9	85	
ESE	.1	.0	.3	.8	.3	.1	.1	.0	.0	.0	.3	36	
SE	.4	.0	.4	.7	.5	.3	.0	.0	.0	.1	.2	44	
SSE	.5	.1	.2	.6	.6	.5	.1	.0	.0	.1	.1	49	
S	1.2	.1	.5	1.5	1.4	.5	.5	.0	.0	.1	.5	101	
SSW	.7	.1	.6	1.2	1.4	.8	.1	.1	.0	.3	.7	104	
SW	1.8	.0	.7	1.5	2.4	.9	.2	.1	.0	.0	1.6	166	
WSW	1.2	.1	.4	1.1	2.9	2.0	.2	.2	.1	.2	1.8	180	
W	.9	.1	.5	1.8	3.6	2.8	.5	.0	.2	.2	4.6	269	
WNW	.3	.0	.2	1.2	1.5	1.7	.6	.3	.0	.0	5.0	192	
NW	.1	.0	.2	.7	1.7	1.7	.2	.1	.1	.1	3.1	130	
NNW	.1	.0	.1	.5	.8	.7	.2	.0	.0	.0	1.9	78	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	
CALM	.7	.0	.1	.5	.5	.5	.1	.0	.1	.1	1.6	72	
TOT OBS	169	13	89	252	393	283	54	14	9	.1	474	1774	
TOT PCT	9.5	.7	5.0	14.2	22.2	16.0	3.0	.8	.5	1.4	26.7	100.0	

PERIOD: (PRIMARY) 1955-1969  
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JULY

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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NH)

CEILING (FEET)	VSBY (NH)				
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2
= OR >6500	.8	1.2	1.4	1.5	1.5
= OR >5000	1.5	2.0	2.2	2.3	2.3
= OR >3500	3.3	4.9	5.2	5.2	5.4
= OR >2000	14.2	19.8	20.6	20.9	21.2
= OR >1000	26.6	38.9	41.8	42.4	42.8
= OR >600	32.9	49.5	54.6	56.1	56.6
= OR >300	34.1	52.6	58.7	60.8	61.5
= OR >150	34.3	53.1	59.3	61.5	62.2
= OR > 0	34.5	53.9	61.3	64.4	65.8
TOTAL	612	955	1086	1142	1167
				1239	1292
					1300

TOTAL NUMBER OF OBS: 1773

PCT FREQ NH <5/8: 26.7

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

TOTAL							
OBS							
0	1	2	3	4	5	6	7
8.7	4.4	6.0	3.4	3.7	5.2	9.2	9.1
						41.9	8.4
							1856

JULY

PERIOD: (PRIMARY) 1955-1969  
(OVER-ALL) 1910-1969

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.0	.0	.0	.2	.1	.0	.1	.2	.2	.2	.1	.1	.0	.0	.0	.0	.0	.0	.17	.9
ND PCP	.3	.1	.1	.3	.3	.0	.3	.4	1.4	.8	1.6	1.3	1.2	.5	.1	.3	.0	.5	181	9.6
TOTAL	5	1	2	9	7	0	7	10	30	19	33	25	23	9	2	6	0	10	198	10.5
PCP	.0	.0	.0	.1	.1	.0	.1	.1	.1	.1	.1	.1	.0	.0	.1	.0	.0	.0	.12	.6
ND PCP	.1	.1	.2	.0	.1	.0	.1	.1	.3	.1	.5	.2	.1	.1	.1	.1	.0	.0	.36	1.9
TOTAL	1	1	3	1	4	0	3	2	7	2	12	4	2	2	2	2	0	0	48	2.5
PCP	.1	.1	.1	.1	.2	.2	.1	.2	.6	.3	.1	.0	.1	.0	.0	.0	.0	.0	.38	2.0
ND PCP	.1	.1	.3	.1	.4	.0	.0	.2	.4	.3	.3	.3	.2	.1	.1	.1	.0	.1	.51	2.7
TOTAL	3	4	6	3	10	4	2	7	18	11	6	5	5	1	2	1	0	1	89	4.7
PCP	.0	.1	.1	.1	.5	.3	.2	.3	.4	.6	.6	.4	.4	.1	.1	.1	.0	.1	.79	4.2
ND PCP	.2	.1	.1	.0	.3	.2	.3	.4	.6	.8	.5	1.1	.8	.2	.2	.1	.0	.1	110	5.8
TOTAL	3	3	3	2	15	9	10	14	19	27	20	27	22	5	5	3	0	2	189	10.0
PCP	.1	.1	.1	.1	.2	.1	.2	.4	.8	.4	.6	.4	.5	.3	.3	.1	.0	.1	.87	4.6
ND PCP	.6	.3	1.0	.8	1.3	.9	.8	.6	1.4	1.4	2.3	2.3	3.3	1.2	1.2	.8	.0	.8	394	20.8
TOTAL	13	7	20	18	27	19	19	19	42	34	55	50	71	27	27	16	0	17	481	25.4
PCP	.0	.0	.2	.0	.1	.0	.1	.2	.2	.1	.2	.2	.1	.2	.1	.0	.0	.1	.29	1.5
ND PCP	3.0	1.1	1.3	.9	1.4	.7	.7	.5	1.9	1.9	3.6	4.4	8.6	6.5	4.2	2.2	.0	2.4	857	45.3
TOTAL	57	20	27	17	28	13	15	14	39	37	73	88	164	125	81	42	0	46	886	46.9
TOTAL	82	36	61	50	91	45	56	66	155	130	199	199	287	169	119	70	0	76	1891	100.0
PCT	4.3	1.9	3.2	2.6	4.8	2.4	3.0	3.5	8.2	6.9	10.5	10.5	15.2	8.9	6.3	3.7	.0	4.0	100.0	

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PERIOD: (PRIMARY) 1955-1969  
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TABLE 9

PERCENT FREQ UF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	*	.0	.0	*	.1	.0	.0	*	.1	.0	*	*	.1	.0	*	*	.0	.4	24	1.0
	4-10	.1	.0	*	.1	.2	.0	.2	*	.4	.3	.7	.4	.4	.2	.0	.2	.0		79	3.2
	11-21	*	.1	*	.2	.1	.0	.1	.2	.7	.4	.6	.5	.5	.1	*	.0	.0		88	3.5
	22+	*	.0	.0	.0	.0	.0	.0	.1	.1	.1	.1	*	.0	.0	.0	.0	.0		12	.5
	TOTAL	5	2	2	9	8	0	7	10	30	19	35	25	23	9	2	6	0	11	203	8.1
1/2<1	0-3	.0	.0	.0	.0	.0	.0	*	.0	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	5	.2
	4-10	*	*	.0	.0	*	.0	*	*	.1	.0	.2	.1	*	*	.1	.1	.0	.0	22	.9
	11-21	.0	.0	.1	.0	.1	.0	*	.1	.1	.1	.2	*	*	*	.0	.0	.0		20	.8
	22+	.0	.0	*	*	*	.0	.0	.0	.0	.0	.0	*	.0	.0	.0	.0	.0		4	.2
	TOTAL	1	1	3	1	4	0	3	3	8	2	13	4	2	2	2	2	0	0	51	2.0
1<2	0-3	.0	.0	*	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	5	.2
	4-10	.0	*	*	*	.1	*	.0	*	.3	.1	.1	*	.1	*	.1	.0	.0		25	1.0
	11-21	.1	.1	.1	.1	.2	.1	.1	.1	.3	.1	.1	.2	.1	.0	.0	*	.0		43	1.7
	22+	.0	.0	.1	.0	.1	*	.0	*	.2	.2	*	*	.0	.0	.0	.0	.0	2	20	.8
	TOTAL	3	4	6	3	10	4	2	7	20	11	6	6	5	1	2	1	0	2	93	3.7
2<5	0-3	*	.0	*	.0	.0	.0	.1	*	.1	.1	.2	.1	*	.1	.0	.0	.0	.1	21	.8
	4-10	*	.0	.1	*	.1	.2	.1	.2	.3	.4	.2	.1	.5	.0	*	.1	.0		59	2.4
	11-21	*	.1	.1	.0	.4	.2	.2	.3	.3	.6	.4	.7	.2	.1	.1	*	.0		96	3.8
	22+	.0	.0	.0	*	.1	*	*	.0	.1	*	.1	.2	.2	.2	.1	.0	.0		30	1.2
	TOTAL	3	3	5	2	16	10	11	14	20	27	24	29	23	8	6	3	0	2	206	8.3
5<10	0-3	*	.0	.1	.1	.0	.0	.1	.0	.1	.1	*	*	.1	*	.0	*	.0	.7	36	1.4
	4-10	.3	.0	.3	.3	.4	.3	.5	.3	.7	.6	.7	.6	1.1	.3	.4	.2	.0		177	7.1
	11-21	.4	.2	.6	.4	.6	.4	.3	.4	1.0	.7	1.2	1.4	2.0	.9	.9	.6	.0		303	12.1
	22+	.1	.1	.0	.1	.2	.1	.1	*	.2	.2	.6	.5	.3	.2	.2	.0	.0	17	79	3.2
	TOTAL	21	9	23	23	31	19	25	20	49	40	66	63	89	38	39	23	0		595	23.6
10+	0-3	.2	*	.3	.0	.1	.0	.2	.1	.3	.1	.6	.2	.2	.1	.5	.1	.0	2.0	127	5.1
	4-10	1.7	1.5	1.2	.6	.8	.3	.6	.2	.8	.7	1.2	2.0	3.5	3.0	1.7	1.2	.0		523	21.0
	11-21	1.4	.8	.8	.7	.8	.3	.2	.4	1.0	.0	2.0	2.6	4.3	3.4	3.0	.9	.0		588	23.6
	22+	.2	.2	.2	.0	*	*	.0	*	.1	.1	.3	.3	.7	1.4	.6	.2	.0		110	4.4
	TOTAL	89	62	62	31	44	17	26	20	51	47	102	126	219	197	146	60	0	49	1348	54.0
	TOTAL	122	81	101	69	113	50	74	74	178	146	246	253	361	255	197	95	0	81	2496	100.0
	PCT	4.9	3.2	4.0	2.8	4.5	2.0	3.0	3.0	7.1	5.9	9.9	10.1	14.5	10.2	7.9	3.8	.0	3.2	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET,NH >4/8),AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	PERCENT FREQUENCY OF CEILING HEIGHTS (FEET,NH >4/8),AND OCCURRENCE OF NH <5/8 BY HOUR												TOTAL NH <5/8 ANY HGT OBS
	000	150	300	450	600	750	900	1050	1200	1350	1500	1650	
00003	6.8	.4	4.6	14.8	18.6	16.5	2.7	.6	.4	1.7	67.1	32.9	474
06009	12.3	.9	4.8	13.2	21.6	15.2	3.2	.5	.7	1.6	73.9	26.1	440
12015	11.1	.2	3.7	14.1	23.6	15.2	3.7	.9	.7	1.2	74.4	25.6	433
18021	8.3	1.3	6.7	14.1	24.3	16.7	2.5	1.1	.2	.9	76.1	23.9	448
TOT	171	13	89	252	394	286	54	14	9	24	1306	489	1795
PCT	9.5	.7	5.0	14.0	21.9	15.9	3.0	.8	.5	1.3	72.8	27.2	100.0

TABLE 11

PERCENT FREQUENCY VS8Y (NM) BY HOUR

HOUR (GMT)	PERCENT FREQUENCY VS8Y (NM) BY HOUR												TOTAL OBS
	<1/2	1/2<1	1<2	2<5	5<10	10+	10+	10+	10+	10+	10+	10+	
00003	5.8	1.1	3.0	8.4	19.7	62.0	463						463
06009	9.8	2.3	2.5	5.9	24.1	55.4	439						439
12015	9.8	1.9	3.3	7.9	25.9	51.3	429						429
18021	7.5	1.1	5.0	8.1	20.4	57.9	442						442
TOT	145	28	61	135	398	1006	1773						1773
PCT	8.2	1.6	3.4	7.6	22.4	56.7	100.0						100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VS8Y (NM) AND/OR  
CEILING HGT (FEET,NH >4/8),BY HOUR

HOUR (GMT)	CUMULATIVE PCT FREQ OF RANGES OF VS8Y (NM) AND/OR CEILING HGT (FEET,NH >4/8),BY HOUR												TOTAL OBS
	<150 <50YD	<600 <1	<1000 <5	1000+ AND5+	NH <5/8 AND 5+								
00003	6.7	14.3	33.9	35.4	30.7	463							463
06009	12.1	20.0	35.3	38.7	26.0	439							439
12015	11.0	19.1	36.1	41.5	22.4	429							429
18021	8.4	19.2	38.0	40.0	21.9	442							442
TOT	168	321	635	689	449	1773							1773
PCT	9.5	18.1	35.8	38.9	25.3	100.0							100.0

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TABLE 13

TEMP F	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP								TOTAL OBS	PCT FREQ
	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100		
65/69	.0	.0	.0	.0	.0	.1	.1	.0	3	.2
60/64	.0	.0	.0	.1	.2	.7	.9	.2	40	2.0
55/59	.0	.0	.0	.1	.6	2.9	6.7	2.5	251	12.8
50/54	.0	.0	.0	.0	1.2	3.7	26.5	24.9	1104	56.3
45/49	.0	.0	.0	.0	.1	1.6	7.6	18.6	546	27.9
40/44	.0	.0	.0	.0	.0	.0	.3	.6	16	.8
TOTAL	0	0	0	4	40	175	823	918	1960	100.0
PCT	.0	.0	.0	.2	2.0	8.9	42.0	46.8		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP													
	NE	E	SE	S	SW	W	NW	VAR	CALM				
65/69	.1	.1	.0	.0	.0	.0	.0	.0	.1				
60/64	.1	.1	.2	.0	.3	.3	.3	.0	.2				
55/59	1.2	.9	.6	1.1	1.9	3.0	1.8	.0	.7				
50/54	4.3	3.4	3.6	7.0	10.5	14.7	7.6	.0	.8				
45/49	1.4	2.1	1.8	4.3	6.5	7.2	2.0	.0	.3				
40/44	.1	.1	.1	.1	.1	.2	.1	.0	.1				
35/39	1.0	1.1	1.1	1.1	1.1	1.1	1.1	.0	.1				
30/34	1.4	1.8	1.4	2.4	3.7	4.9	2.8	0	.4				
25/29	7.1	6.5	6.3	12.4	19.2	25.4	11.6	.0	2.1				

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR													
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS				
0000	66	63	59	52	47	46	43	52.6	636				
0100	68	61	57	51	46	44	43	51.3	629				
0600	64	57	54	50	45	43	43	50.1	577				
1200	64	62	56	51	46	44	43	50.9	657				
1800	68	61	57	51	46	44	43	51.3	2499				
TOT													

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR										TOTAL
HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN		OBS	
00003	.0	.4	4.0	13.9	44.0	37.6	86		495	
06009	.0	.4	2.0	8.3	40.9	48.4	89		496	
12015	.0	.0	.7	6.0	42.9	50.4	90		450	
18021	.0	.0	1.3	7.3	40.2	51.2	90		520	
TOT	0	4	40	175	823	919	89		1961	

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	41	45	49	53	57	61	65	TOT	M FOG	WD FOG
14/10	.0	.0	.0	.0	.1	.1	.1	4	.0	.2
11/13	.0	.0	.1	.2	.2	.3	.1	15	.1	.8
9/10	.0	.1	.1	.6	.7	.1	.0	27	.2	1.3
7/8	.0	.3	.6	1.3	.7	.1	.0	53	.4	2.6
6	.1	.2	.5	.8	.3	.1	.0	35	.1	1.9
5	.1	.3	1.5	1.8	.6	.1	.0	77	1.0	3.4
4	.2	1.3	2.7	3.8	.4	.0	.0	147	1.7	6.7
3	.0	1.1	4.0	3.3	.3	.0	.0	151	1.5	7.2
2	.0	1.9	7.5	3.6	.5	.0	.0	235	2.8	10.7
1	.0	1.8	6.6	3.4	.2	.0	.0	210	2.8	9.3
0	.1	4.1	9.1	3.3	.1	.0	.0	289	3.1	13.5
-1	.0	2.4	5.3	1.5	.0	.0	.0	160	1.4	7.7
-2	.1	2.9	4.4	.7	.0	.0	.0	141	1.3	6.8
-3	.1	1.8	2.4	.2	.0	.0	.0	76	.9	3.5
-4	.3	1.3	1.1	.1	.0	.0	.0	48	.5	2.3
-5	.2	1.4	.7	.0	.0	.0	.0	39	.5	1.7
-6	.0	.7	.3	.1	.0	.0	.0	20	.2	.9
-7/-8	.0	.5	.1	.1	.0	.0	.0	10	.1	.5
-9/-10	.0	.1	.2	.0	.0	.0	.0	5	.0	.3
TOTAL	20	383	821	430	73	13	2	1742	325	1417
PCT	1.1	22.0	47.1	24.7	4.2	.7	.1	100.0	18.7	81.3



PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N							NE							TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+		
<1	.1	.3	.0	.0	.0	.0	3	.0	.4	.0	.0	.0	.0	3	
1-2	.0	.7	.6	.0	.0	.0	9	.1	.6	.3	.0	.0	.0	7	
3-4	.0	.3	1.0	.3	.0	.0	11	.0	.1	2.1	.0	.0	.0	16	
5-6	.1	.1	.6	.0	.0	.0	6	.0	.0	.7	.3	.0	.0	7	
7	.0	.0	.0	.3	.0	.0	2	.0	.0	.0	.3	.0	.0	2	
8-9	.0	.0	.0	.3	.0	.0	2	.0	.0	.0	.3	.1	.0	3	
10-11	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
13-16	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
TOTAL	2	10	15	6	0	0	33	1	8	22	6	1	0	38	
PCT	.3	1.4	2.1	.9	.0	.0	4.7	.1	1.1	3.1	.9	.1	.0	5.4	

HGT	E							SE							TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+		
<1	.0	.4	.0	.0	.0	.0	3	.1	.3	.0	.0	.0	.0	3	
1-2	.0	1.0	1.3	.0	.0	.0	16	.0	1.4	.4	.0	.0	.0	13	
3-4	.0	.1	1.7	.7	.0	.0	18	.0	1.0	.9	.0	.0	.0	13	
5-6	.0	.0	.4	.0	.0	.0	3	.0	.3	.9	.1	.0	.0	9	
7	.0	.0	.9	.1	.0	.0	7	.0	.1	.3	.0	.0	.0	3	
8-9	.0	.0	.1	.1	.1	.0	3	.0	.0	.0	.0	.0	.0	0	
10-11	.0	.0	.0	.3	.0	.0	2	.0	.0	.0	.0	.0	.0	0	
12	.0	.0	.0	.1	.0	.0	1	.0	.0	.0	.0	.0	.0	0	
13-16	.0	.0	.0	.0	.0	.0	1	.0	.0	.0	.1	.0	.0	1	
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
TOTAL	0	11	31	11	1	0	54	1	22	17	2	0	0	42	
PCT	.0	1.6	4.4	1.6	.1	.0	7.7	.1	3.1	2.4	.3	.0	.0	6.0	



JULY

PERIOD: (PRIMARY)  
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TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	7.6	6.2	.0	.0	.0	.0					103
1-2	.5	13.8	7.4	.0	.0	.0					162
3-4	.3	8.6	17.4	2.4	.0	.0					214
5-6	.3	3.2	13.5	2.1	.0	.0					143
7	.0	.5	5.6	2.3	.1	.0					64
8-9	.0	.3	1.5	1.2	.3	.0					24
10-11	.0	.0	1.1	.9	.0	.0					15
12	.0	.0	.3	1.1	.4	.0					13
13-16	.0	.0	.0	.5	.5	.0					8
17-19	.0	.0	.0	.0	.0	.0					0
20-22	.0	.0	.0	.0	.0	.0					0
23-25	.0	.0	.0	.0	.0	.0					0
26-32	.0	.0	.0	.0	.0	.0					0
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	65	243	349	79	10	.0					746
PCT	8.7	32.6	46.8	10.6	1.3	.0					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-85	87+	TOTAL	MEAN HGT
<6	1.9	11.6	16.3	10.1	3.1	.9	1.2	.2	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	394	3
6-7	.0	1.5	7.4	7.6	5.7	1.5	.7	.7	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	218	5
8-9	.0	.2	2.7	2.0	2.8	1.7	.9	.6	.8	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	102	6
10-11	.0	.1	.1	.5	.9	.3	.3	.5	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	27	8
12-13	.0	.0	.0	.1	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	7
>13	.0	.0	.0	.0	.2	.0	.0	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	6	9
INDET	12.2	.0	.5	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	110	0
TOTAL	121	116	232	175	111	39	29	19	17	1	0	0	0	0	0	0	0	0	0	860	4
PCT	14.1	13.5	27.0	20.3	12.9	4.5	3.4	2.2	2.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

AUGUST

PERIOD: (PRIMARY) 1951-1969  
(OVER-ALL) 1921-1969

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TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER PCPN					WD PCPN	FOG	SMOKE	DUST	NO SIG WEA	
N	.3	.0	.1	.0	.0	.0	.0	.4	7	.0	.5	.0	.0	.0	2.0	47
NNE	.1	.0	.0	.0	.0	.0	.0	.1	1	.0	.0	.0	.0	.0	.8	13
NE	.3	.0	.3	.0	.0	.0	.0	.6	9	.0	.8	.0	.0	.0	1.1	39
ENE	.3	.0	.3	.0	.0	.0	.0	.6	9	.0	.1	.0	.0	.0	.4	17
E	.6	.0	1.1	.0	.0	.0	.0	1.6	26	.0	1.1	.1	.0	.0	1.3	65
ESE	.5	.0	.4	.0	.0	.0	.0	.8	13	.0	.4	.0	.0	.0	1.3	39
SE	.7	.0	.9	.0	.0	.0	.0	1.4	22	.0	1.1	.1	.0	.0	1.9	71
SSE	.5	.1	.2	.0	.0	.0	.0	.7	11	.0	1.8	.0	.0	.0	2.1	72
S	1.1	.1	1.1	.0	.0	.0	.0	2.1	33	.0	3.2	.1	.1	.1	4.2	153
SSW	.5	.1	.9	.0	.0	.0	.0	1.2	19	.0	2.5	.0	.0	.0	3.7	117
SW	1.0	.0	1.0	.0	.0	.0	.0	1.6	26	.0	3.9	.1	.0	.0	6.1	185
WSW	.6	.2	.6	.0	.0	.0	.0	1.3	21	.0	1.3	.1	.0	.0	6.2	141
W	1.2	.0	.6	.0	.0	.0	.0	1.8	29	.0	2.4	.2	.0	.0	13.9	289
WNW	.6	.0	.3	.0	.0	.0	.0	.9	14	.0	1.1	.0	.0	.0	7.1	144
NW	.2	.0	.1	.0	.0	.0	.0	.2	3	.0	.4	.0	.0	.0	5.8	101
NNW	.1	.0	.0	.0	.0	.0	.0	.1	2	.0	.4	.1	.0	.0	2.6	50
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
CALM	.1	.0	.0	.0	.0	.0	.0	.1	1	.0	.6	.1	.0	.0	1.5	35
TOT OBS	139	6	124	0	0	0	0	15.6	246	.0	344	12	1	1	975	1578
TOT PCT	8.8	.4	7.9	.0	.0	.0	.0	15.6	246	.0	21.8	.8	.1	.1	61.8	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER PCPN					WD PCPN	FOG	SMOKE	DUST	NO SIG WEA	
0003	6.1	.5	4.1	.0	.0	.0	.0	9.7	40	.0	23.8	1.0	.0	.2	65.2	411
0609	7.9	.2	9.4	.0	.0	.0	.0	17.5	71	.0	22.5	1.0	.0	.0	59.0	405
12015	13.2	.0	10.8	.0	.0	.0	.0	20.8	79	.0	17.2	.0	.0	.0	62.0	379
18021	8.4	.8	7.3	.0	.0	.0	.0	14.7	58	.0	22.8	1.0	.0	.0	61.5	395
TOT	140	6	125	0	0	0	0	15.6	248	.0	344	12	1	1	985	1590
PCT	8.8	.4	7.9	.0	.0	.0	.0	15.6	248	.0	21.6	.8	.1	.1	61.9	100.0

AUGUST

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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)					
	0-3	4-10	11-21	22-33	34-47	00	03	06	09	12					15	18	21			
N	.3	1.0	1.2	.4	.0	.0	55	2.9	12.4	3.6	.0	2.6	1.6	2.2	.0	4.3	2.8			
NNE	.1	.3	.3	.1	.1	.0	15	.8	12.9	.7	.0	.7	.0	1.4	3.3	.5	.0			
NE	.3	1.0	.8	.4	.1	.0	48	2.6	14.0	2.4	3.4	3.1	.0	3.3	.0	2.2	2.8			
ENE	.0	.4	.4	.2	.0	.0	19	1.0	13.8	1.9	1.7	1.0	.0	.8	.0	.7	.0			
E	.2	1.4	1.3	.7	.1	.0	69	3.7	14.6	1.9	1.7	4.5	9.5	3.9	8.3	2.9	5.6			
ESE	.2	.9	.9	.4	.0	.0	43	2.3	14.0	2.4	1.7	1.9	3.2	2.8	1.7	2.4	1.4			
SE	.3	1.3	1.8	1.0	.2	.0	85	4.6	15.5	4.8	.0	4.3	.0	4.7	5.0	6.3	1.4			
SSE	.1	1.5	2.1	.8	.0	.0	85	4.6	14.5	4.3	10.2	5.0	1.6	3.1	3.3	5.0	6.9			
S	.3	2.9	4.4	1.6	.2	.0	175	9.4	14.7	9.7	10.2	11.5	4.8	8.6	1.7	9.1	9.7			
SSW	.1	2.2	3.8	.7	.1	.0	130	7.0	14.7	7.8	6.8	6.0	11.1	5.3	8.3	7.0	11.1			
SW	.1	3.2	7.1	2.0	.1	.0	234	12.5	15.8	13.5	16.9	12.0	20.6	10.3	16.7	10.6	18.1			
WSW	.2	1.8	5.6	1.1	.1	.0	164	8.8	16.0	6.2	3.4	10.0	4.8	10.9	16.7	8.7	8.3			
W	.1	4.4	9.6	4.0	.6	.0	349	18.7	16.9	23.0	20.3	16.5	17.5	18.9	18.3	16.1	19.4			
WNW	.2	2.6	4.5	1.7	.5	.0	176	9.4	16.1	8.6	18.6	7.9	15.9	9.5	5.0	10.6	6.9			
NW	.3	2.3	3.3	.9	.2	.0	130	7.0	13.8	5.5	3.4	7.4	7.9	8.1	3.3	8.2	5.6			
NNW	.2	.9	1.4	.4	.1	.0	54	2.9	14.7	2.1	.0	3.3	1.6	3.6	8.3	2.9	.0			
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0			
CALM	2.0	526	911	303	40	0	37	2.0	.0	1.7	1.7	2.2	.0	2.5	.0	2.6	.0			
TOT OBS	88	28.2	48.8	16.2	2.1	.0	1868	100.0	15.0	421	59	418	63	359	60	416	72			
TOT PCT	4.7	28.2	48.8	16.2	2.1	.0	1868	100.0	15.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)					
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD	00	03	06	09	12	15	18	21
N	.8	2.1	.6	.3	.0	70	3.7	12.5	4.3	.0	3.3	1.6	3.6	3.3	4.8	2.8
NE	.8	1.6	.8	.4	.0	67	3.6	14.0	4.3	5.1	4.1	.0	4.2	.0	2.9	2.8
E	1.4	2.6	1.5	.4	.0	112	6.0	13.8	4.3	3.4	6.5	12.7	6.7	10.0	5.3	6.9
SE	1.1	4.9	2.5	.6	.0	170	9.1	15.0	9.0	10.2	9.3	1.6	7.8	8.3	11.3	8.3
S	2.0	8.5	5.0	.8	.1	305	16.3	14.7	17.6	16.9	17.5	15.9	13.9	10.0	16.1	20.8
SW	1.0	11.2	8.1	1.0	.0	398	21.3	15.9	19.7	20.3	22.0	25.4	21.2	33.3	19.2	26.4
W	2.6	12.7	10.3	2.4	.2	525	28.1	16.6	31.6	39.0	24.4	33.3	28.4	23.3	26.7	26.4
NW	2.0	5.0	2.3	.5	.1	184	9.9	14.1	7.6	3.4	10.8	9.5	11.7	11.7	11.1	5.6
VAR	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	2.0	906	580	121	5	37	2.0	.0	1.7	1.7	2.2	.0	2.5	.0	2.6	.0
TOT OBS	256	48.5	31.0	6.5	.3	1868	100.0	15.0	421	59	418	63	359	60	416	72
TOT PCT	13.7	48.5	31.0	6.5	.3	1868	100.0	15.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	1-3	4-10	11-21	22-33	34-47	48+	CALM	MEAN	PCT FREQ	TOTAL OBS
00003	1.9	29.6	46.7	18.5	1.7	.0	1.7	15.2	100.0	480
06009	2.1	26.2	50.1	16.2	3.5	.0	1.9	15.6	100.0	481
12015	2.6	29.1	48.2	16.7	1.2	.0	2.1	14.6	100.0	419
18021	4.3	27.9	50.0	13.5	2.0	.0	2.3	14.5	100.0	488
TOT	51	526	911	303	40	0	37	15.0		1868
PCT	2.7	28.2	48.8	16.2	2.1	.0	2.0		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION								MEAN CLOUD COVER	
	0-2	3-4	5-7	8 &	OBSCD	TOTAL OBS				
N	.7	.2	1.1	1.7		43	6.0			
NNE	.2	.1	.3	.2		11	5.1			
NE	.3	.3	.5	1.2		29	6.0			
ENE	.0	.0	.3	.6		11	7.3			
E	.0	.0	.5	3.0		42	7.8			
ESE	.0	.1	.2	1.8		26	7.7			
SE	.2	.2	.6	4.1		60	7.5			
SSE	.2	.1	1.0	4.0		63	7.5			
S	.2	.1	1.6	8.0		119	7.6			
SSW	.0	.2	.7	5.1		73	7.7			
SW	.6	.1	2.4	6.6		116	7.2			
WSW	.7	.2	2.6	5.2		105	6.9			
W	2.1	2.3	7.2	8.5		242	6.1			
WNW	1.5	1.1	3.4	3.1		109	5.7			
NW	1.3	1.4	3.1	2.1		95	5.3			
NNW	.8	.3	.9	1.1		38	5.3			
VAR	.0	.0	.0	.0		0	.0			
CALM	.2	.3	.4	1.1		24	6.3			
TOT OBS	108	84	324	690		1206	6.6			
TOT PCT	9.0	7.0	26.9	57.2		100.0				

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT>NH >4/8)

		AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION												TOTAL OBS	
		000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8	ANY HGT		
		149	299	599	999	1999	3499	4999	6499	7999					
N		.2	.1	.2	.4	.7	.5	.2	.1	.1	.0	1.0	.0	43	
NNE		.1	.0	.0	.2	.1	.2	.0	.0	.0	.0	.3	.0	11	
NE		.7	.1	.0	.2	.3	.3	.0	.0	.0	.0	.7	.0	29	
ENE		.1	.0	.2	.0	.3	.1	.0	.0	.0	.0	.2	.0	11	
E		.9	.2	.2	1.0	.7	.2	.0	.0	.1	.0	.1	.0	42	
ESE		.5	.0	.3	.2	.1	.7	.1	.0	.0	.0	.2	.0	26	
SE		1.2	.1	.1	1.0	1.2	.8	.1	.0	.0	.0	.5	.0	60	
SSE		1.2	.2	.3	1.1	1.1	.7	.0	.1	.0	.0	.4	.0	63	
S		2.2	.2	.8	2.3	2.0	.9	.5	.0	.0	.0	.8	.0	119	
SSW		1.2	.2	.4	1.3	1.1	.7	.4	.0	.0	.0	.7	.0	73	
SW		1.5	.0	.2	1.7	2.5	1.7	.3	.0	.0	.0	1.6	.0	116	
WSW		.8	.2	.6	1.6	2.1	1.3	.4	.0	.0	.0	1.6	.0	105	
W		.7	.2	1.0	2.6	3.3	3.9	.9	.1	.1	.2	7.1	.0	242	
WNW		.7	.2	.2	.7	1.5	1.7	.0	.0	.1	.2	3.7	.0	109	
NW		.2	.0	.0	.4	1.4	.9	.6	.0	.1	.0	4.0	.0	95	
NNW		.2	.0	.1	.4	.5	.2	.2	.1	.1	.1	1.3	.0	38	
VAR		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	
CALM		.2	.0	.1	.2	.7	.1	.1	.1	.0	.0	.7	.0	24	
TOT OBS		152	20	59	188	237	181	46	5	6	12	300	.0	1206	
TOT PCT		12.6	1.7	4.9	15.6	19.7	15.0	3.8	.4	.5	1.0	24.9	.0	100.0	

PERIOD: (PRIMARY) 1951-1969  
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AREA 0007 UNIMAK  
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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)									
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0		
= OR >6500	1.1	1.2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
= OR >5000	1.4	1.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
= OR >3500	4.3	5.2	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
= OR >2000	13.7	19.2	20.6	20.7	20.7	20.8	20.8	20.8	20.8	20.8
= OR >1000	25.1	37.3	39.9	40.2	40.3	40.4	40.5	40.5	40.5	40.5
= OR >600	32.1	49.9	54.6	55.7	55.8	56.0	56.2	56.2	56.2	56.2
= OR >300	34.2	53.3	59.2	60.3	60.6	60.7	61.0	61.0	61.0	61.0
= OR >150	34.4	53.9	60.3	62.0	62.2	62.4	62.6	62.6	62.6	62.6
= OR > 0	34.7	54.9	62.6	65.2	67.1	70.8	74.5	75.0	75.0	75.0
TOTAL	417	660	752	784	807	851	895	901	901	901

TOTAL NUMBER OF OBS: 1202

PCT FREQ NH <5/8: 25.0

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

									TOTAL OBS
0	1	2	3	4	5	6	7	8	
4.0	4.0	6.6	5.4	4.7	5.8	11.0	10.2	37.5	1284

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PERIOD: (PRIMARY) 1951-1969  
(OVER-ALL) 1921-1969

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.0	.0	.1	.2	.1	.1	.0	.3	.1	.1	.2	.0	.2	.1	.0	.0	.0	.23	1.5
NO PCP	.3	.0	.4	.4	.2	.6	.5	1.5	1.1	1.7	.6	.7	.2	.2	.2	.0	.3	140	8.9
TOTAL	4	0	9	10	4	10	8	27	19	28	13	11	6	4	3	0	4	163	10.4
PCP	.0	.0	.0	.2	.1	.1	.1	.1	.1	.4	.2	.4	.1	.0	.0	.0	.0	30	1.9
NO PCP	.0	.0	.0	.1	.0	.1	.1	.6	.6	.4	.3	.3	.2	.0	.1	.0	.0	41	2.6
TOTAL	0	0	0	1	1	3	3	11	11	12	7	11	4	0	2	0	0	71	4.5
PCP	.0	.0	.1	.1	.0	.3	.2	.1	.4	.3	.2	.2	.3	.0	.0	.0	.0	33	2.1
NO PCP	.0	.0	.1	.1	.3	.1	.6	.4	.4	.8	.2	.4	.2	.2	.0	.0	.1	61	3.9
TOTAL	0	0	4	3	4	5	12	9	13	17	6	9	8	3	0	0	1	94	6.0
PCP	.1	.0	.2	.8	.3	.6	.1	.6	.2	.2	.0	.4	.1	.1	.1	.0	.1	63	4.0
NO PCP	.1	.0	.3	.4	.1	.4	.7	.6	.6	.8	.4	1.0	.4	.1	.1	.0	.2	99	6.3
TOTAL	4	0	8	18	5	15	13	18	13	16	7	22	9	3	3	0	4	162	10.3
PCP	.3	.1	.1	.4	.4	.2	.2	.7	.4	.5	.6	.6	.2	.0	.0	.0	.0	75	4.8
NO PCP	.4	.3	.3	.5	.4	.8	1.1	1.7	1.4	2.4	1.7	4.7	2.0	1.0	.6	.0	.3	308	19.7
TOTAL	10	6	5	15	14	15	20	38	28	46	35	82	35	15	9	0	5	383	24.5
PCP	.1	.0	.1	.0	.0	.2	.1	.3	.0	.3	.2	.2	.0	.0	.0	.0	.0	21	1.3
NO PCP	1.8	.4	.8	.9	.7	1.1	.9	2.7	2.0	4.0	4.3	9.6	5.2	4.8	2.1	.0	1.2	672	42.9
TOTAL	29	7	13	14	11	21	15	48	32	66	70	154	82	75	33	0	19	693	44.3
TOTAL	47	13	39	65	39	69	71	151	116	185	138	289	144	100	50	0	33	1566	100.0
PCT	3.0	.8	2.5	4.2	2.5	4.4	4.5	9.6	7.4	11.8	8.8	18.5	9.2	6.4	3.2	.0	2.1	100.0	



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PERIOD: (PRIMARY) 1951-1969  
(OVER-ALL) 1921-1969

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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.1	.0	.1	.0	.1	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	11	.6
	4-10	.1	.0	.1	.1	.2	.0	.3	.3	.5	.3	.3	.1	.3	.1	.1	.1	.0	.0	46	2.5
	11-21	.0	.0	.2	.1	.2	.2	.3	.3	.7	.7	1.0	.3	.3	.1	.2	.1	.0	.0	83	4.5
	22+	.0	.0	.1	.1	.1	.0	.1	.1	.3	.0	.3	.3	.0	.2	.0	.0	.0	.0	25	1.4
	TOTAL	4	0	9	3	10	4	12	8	27	19	28	13	11	6	4	3	0	4	165	8.9
1/2<1	0-3	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	2	.1
	4-10	.0	.0	.0	.0	.1	.0	.0	.1	.2	.2	.2	.1	.1	.0	.0	.1	.0	.0	17	.9
	11-21	.0	.0	.0	.1	.2	.1	.1	.1	.2	.4	.4	.2	.2	.1	.0	.0	.0	.0	34	1.8
	22+	.0	.0	.0	.0	.0	.0	.1	.1	.2	.0	.2	.1	.4	.1	.0	.0	.0	.0	20	1.1
	TOTAL	0	0	0	1	5	1	3	3	11	11	13	7	12	4	0	2	0	0	73	4.0
1<2	0-3	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	3	.2
	4-10	.0	.0	.1	.0	.1	.1	.0	.1	.2	.2	.2	.1	.2	.1	.1	.1	.0	.0	24	1.3
	11-21	.0	.0	.1	.0	.0	.1	.1	.4	.3	.4	.5	.2	.1	.2	.1	.0	.0	.0	47	2.5
	22+	.0	.0	.1	.0	.1	.1	.2	.1	.1	.1	.2	.1	.2	.2	.0	.0	.0	.0	24	1.3
	TOTAL	0	0	4	0	3	4	5	12	10	13	18	6	9	9	3	1	0	1	98	5.3
2<5	0-3	.0	.0	.0	.0	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	6	.3
	4-10	.1	.0	.2	.1	.4	.2	.2	.2	.3	.2	.2	.1	.5	.0	.0	.0	.0	.0	48	2.6
	11-21	.1	.0	.1	.1	.2	.1	.4	.4	.3	.4	.7	.3	.7	.1	.2	.0	.0	.0	75	4.1
	22+	.1	.0	.2	.1	.3	.1	.3	.2	.4	.1	.3	.1	.2	.4	.1	.2	.0	.0	50	2.7
	TOTAL	5	0	8	4	18	6	17	13	19	13	22	8	25	9	5	3	0	4	179	9.7
5<10	0-3	.0	.1	.1	.0	.1	.1	.1	.1	.2	.1	.0	.0	.0	.0	.1	.1	.0	.3	21	1.1
	4-10	.2	.1	.2	.1	.4	.3	.3	.4	.5	.3	.7	.2	.9	1.0	.5	.1	.0	.0	111	6.0
	11-21	.2	.1	.1	.2	.2	.2	.4	.5	1.3	.9	1.7	1.7	2.9	.8	.4	.3	.0	.0	219	11.9
	22+	.1	.1	.0	.1	.3	.3	.2	.3	.2	.4	.8	.3	1.4	.7	.3	.1	.0	.0	98	5.3
	TOTAL	10	7	6	5	16	15	16	24	42	31	58	39	95	45	24	10	0	6	449	24.3
10+	0-3	.2	.0	.1	.0	.0	.1	.2	.0	.1	.0	.1	.1	.1	.2	.1	.1	.0	1.1	42	2.3
	4-10	.6	.2	.5	.3	.3	.3	.5	.7	1.1	1.0	1.6	1.3	2.5	1.5	1.7	.5	.0	.0	270	14.6
	11-21	.9	.2	.3	.1	.5	.3	.5	.4	1.6	1.0	2.9	2.9	5.6	3.2	2.5	1.1	.0	.0	444	24.1
	22+	.2	.1	.2	.0	.1	.0	.3	.2	.7	.3	.5	.4	2.4	.7	.7	.2	.0	.0	124	6.7
	TOTAL	36	8	21	6	15	12	28	23	64	41	93	88	197	103	91	34	0	20	880	47.7
	TOTAL	55	15	48	19	67	42	81	83	173	128	232	161	349	176	127	53	0	35	1844	100.0
	PCT	3.0	.8	2.6	1.0	3.6	2.3	4.4	4.5	9.4	6.9	12.6	8.7	18.9	9.5	6.9	2.9	.0	1.9	100.0	

PERIOD: (PRIMARY) 1951-1969  
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET,NH >4/8),AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	9.8	2.1	4.9	12.8	20.4	17.4	3.7	.3	.9	.6	72.9	27.1	328
06009	13.9	2.3	6.5	16.5	17.4	14.8	3.9	.6	.6	1.9	78.4	21.6	310
12015	14.8	1.1	3.6	15.2	18.4	11.9	4.0	.0	.0	.4	69.3	30.7	277
18021	11.6	1.0	4.2	17.0	21.9	14.5	3.5	.6	.3	1.0	75.6	24.4	311
TOT	152	20	59	188	240	181	46	5	6	12	909	317	1226
PCT	12.4	1.6	4.8	15.3	19.6	14.8	3.8	.4	.5	1.0	74.1	25.9	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	7.8	.6	3.1	5.6	23.4	59.4	320
06009	7.6	2.6	4.0	9.2	22.4	54.1	303
12015	8.5	2.2	3.0	10.0	25.5	50.9	271
18021	8.8	2.9	1.3	7.1	23.4	56.5	308
TOT	98	25	34	95	284	666	1202
PCT	8.2	2.1	2.8	7.9	23.6	55.4	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET,NH >4/8),BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND5+	NH <5/8 AND 5+	TOTAL OBS
00003	10.3	17.5	32.5	42.2	25.3	320
06009	13.9	22.8	43.6	36.3	20.1	303
12015	14.8	20.7	39.9	31.7	28.4	271
18021	11.4	18.5	39.0	38.0	23.1	308
TOT	150	238	464	448	290	1202
PCT	12.5	19.8	38.6	37.3	24.1	100.0

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TABLE 13

TEMP F	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP								TOTAL OBS	PCT FREQ
	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100		
65/69	.0	.0	.0	.0	.1	.0	.1	.0	3	.2
60/64	.0	.0	.0	.0	.3	.8	.5	.1	25	1.7
55/59	.0	.0	.1	.0	.5	4.1	10.2	8.8	345	23.7
50/54	.0	.0	.0	.0	1.0	4.3	26.0	35.1	966	66.3
45/49	.0	.0	.0	.0	.2	.3	2.1	5.5	117	8.0
TOTAL	0	0	1	0	31	137	566	721	1456	100.0
PCT	.0	.0	.1	.0	2.1	9.4	38.9	49.5		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP												
N	NE	E	SE	S	SW	W	NW	VAR	CALM			
.0	.0	.0	.0	.0	.1	.1	.0	.0	.0			
.0	.1	.1	.3	.0	.3	.8	.2	.0	.0			
.5	1.0	2.0	2.2	4.1	6.1	5.7	1.8	.0	.1			
3.0	2.4	3.1	5.9	11.6	15.7	17.9	5.8	.0	.3			
.1	.3	.4	.5	1.1	1.0	3.2	1.4	.0	1.0			
53	55	81	130	244	336	402	134	0	.0			
3.6	3.8	5.6	8.9	16.8	23.1	27.6	9.2	.0	1.4			

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR										
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS	TOTAL OBS
00&03	68	63	60	54	49	46	43	54.1	483	
06&09	64	60	57	53	48	46	45	52.8	482	
12&15	68	58	56	52	48	45	44	51.8	419	
18&21	66	59	57	53	48	46	43	52.7	491	
TOT	68	61	58	53	48	46	43	52.6	1875	

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR										
HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN			
00&03	.0	.3	4.0	14.5	43.7	37.5	87			
06&09	.0	.0	.8	8.5	34.6	56.1	90			
12&15	.0	.0	1.2	5.3	37.0	56.5	91			
18&21	.0	.0	2.3	8.8	40.2	48.7	89			
TOT	0	1	31	137	568	722	89			

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	41	45	49	53	57	61	65	TOT	W	NO FOG
17/19	.0	.0	.0	.0	.0	.0	.1	1	.0	.1
14/16	.0	.0	.0	.0	.0	.1	.0	1	.0	.1
11/13	.0	.0	.0	.3	.1	.3	.1	10	.1	.7
9/10	.0	.0	.1	.5	.7	.0	.0	17	.5	.7
7/8	.0	.0	.4	1.0	.9	.5	.0	38	.4	2.4
6	.0	.0	.3	1.0	.5	.1	.0	26	.7	1.3
5	.0	.1	.4	2.4	1.8	.1	.0	64	1.5	3.3
4	.0	.1	1.1	4.0	1.3	.0	.0	87	2.1	4.4
3	.0	.0	1.6	4.2	.9	.0	.0	90	2.4	4.3
2	.0	.2	4.3	6.2	1.0	.0	.0	158	2.7	9.1
1	.0	.6	4.4	6.7	.2	.0	.0	160	3.2	8.7
0	.0	1.2	8.5	7.2	.4	.1	.0	234	4.2	13.3
-1	.0	.4	4.5	3.5	.1	.0	.0	114	1.9	6.6
-2	.0	.7	5.9	2.2	.0	.0	.0	118	.7	8.1
-3	.1	.3	4.2	1.3	.0	.0	.0	79	.7	5.1
-4	.0	.6	3.1	.6	.0	.0	.0	58	.4	3.9
-5	.0	.4	2.1	.4	.0	.0	.0	39	.3	2.6
-6	.0	.2	.5	.1	.0	.0	.0	11	.0	.8
-7/-8	.0	.6	.8	.2	.0	.0	.0	22	.1	1.5
-9/-10	.0	.0	.4	.1	.0	.0	.0	7	.0	.5
-11/-13	.0	.1	.4	.0	.0	.0	.0	7	.0	.5
TOTAL	2	73	579	563	107	15	2	1341	295	1046
PCT	.1	5.4	43.2	42.0	8.0	1.1	.1	100.0	22.0	78.0

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N					NE					48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47		
<1	.2	.6	.0	.0	.0	.0	.6	.0	.0	.0	.0	3
1-2	.2	.6	.0	.0	.0	.2	.2	.0	.0	.0	.0	2
3-4	.0	.2	1.0	.0	.0	.2	.4	.8	.0	.0	.0	7
5-6	.0	.4	1.6	.8	.0	.2	.2	.0	.0	.0	.0	2
7	.0	.0	.0	.2	.0	.0	.0	.2	.2	.0	.0	2
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	1
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	2	9	13	5	0	3	7	5	2	0	0	17
PCT	.4	1.9	2.7	1.0	.0	.6	1.4	1.0	.4	.0	.0	3.5

HGT	E					SE					48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47		
<1	.0	.2	.0	.0	.0	.0	.6	.0	.0	.0	.0	3
1-2	.0	1.2	.4	.0	.0	.0	1.4	.6	.0	.0	.0	10
3-4	.0	.6	.8	.0	.0	.0	.4	2.3	.2	.0	.0	14
5-6	.0	.0	1.0	.0	.0	.2	.4	.8	.6	.0	.0	10
7	.0	.0	.0	.0	.0	.0	.2	.2	.0	.0	.0	2
8-9	.0	.0	.0	.2	.0	.0	.2	.0	.2	.0	.0	2
10-11	.0	.0	.2	.2	.0	.0	.0	.2	.0	.0	.0	1
12	.0	.0	.2	.2	.0	.0	.0	.0	.0	.0	.0	0
13-16	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	0	10	13	4	0	1	16	20	5	0	0	42
PCT	.0	2.1	2.7	.8	.0	.2	3.3	4.1	1.0	.0	.0	8.6

PERIOD: (PRIMARY)  
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TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S										SW				TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	
<1	.0	.4	.0	.0	.0	.0	2	.0	.6	.0	.0	.0	.0	3	
1-2	.0	1.4	1.4	.0	.0	.0	14	.0	1.4	1.9	.0	.0	.0	16	
3-4	.2	.2	2.1	.6	.0	.0	15	.0	3.3	3.9	.6	.0	.0	33	
5-6	.0	1.0	2.5	.6	.2	.0	21	.0	.8	4.7	.8	.0	.0	31	
7	.0	.2	1.4	.4	.2	.0	11	.0	.2	1.2	.2	.0	.0	8	
8-9	.0	.0	.6	.6	.0	.0	6	.0	.2	.4	.2	.0	.0	4	
10-11	.0	.0	.4	.6	.0	.0	5	.0	.0	.4	.6	.0	.0	5	
12	.0	.0	.2	.0	.0	.0	1	.0	.0	.0	.0	.2	.0	1	
13-16	.0	.0	.0	.2	.4	.0	3	.0	.0	.2	.6	.0	.0	4	
17-19	.0	.0	.0	.2	.0	.0	1	.0	.0	.0	.0	.0	.0	0	
20-22	.0	.0	.0	.2	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
TOTAL	1	16	42	16	4	0	79	0	32	57	15	1	0	105	
PCT	.2	3.3	8.6	3.3	.8	.0	16.3	.0	6.6	11.7	3.1	.2	.0	21.6	

HGT	W										NW				GRAND TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	
<1	.0	1.2	.0	.0	.0	.0	6	.0	.2	.0	.0	.0	.0	1	23
1-2	.0	3.9	2.1	.0	.0	.0	29	.0	1.2	1.6	.0	.0	.0	14	97
3-4	.0	2.7	3.9	1.0	.0	.0	37	.0	1.2	2.5	.4	.0	.0	20	139
5-6	.0	1.0	2.7	.6	.0	.0	21	.2	.4	1.6	.6	.0	.0	14	118
7	.0	.0	1.2	1.0	.2	.0	12	.0	.0	.4	.2	.2	.0	4	40
8-9	.0	.0	1.6	1.6	.0	.0	16	.0	.0	.0	.0	.0	.0	0	30
10-11	.0	.0	.6	.4	.0	.0	5	.0	.0	.2	.0	.0	.0	1	19
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	4
13-16	.0	.0	.4	.4	.0	.0	4	.0	.0	.0	.0	.0	.0	0	12
17-19	.0	.0	.0	.4	.2	.0	3	.0	.0	.0	.0	.0	.0	0	4
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
TOTAL	0	43	61	27	2	0	133	1	15	31	6	1	0	54	486
PCT	.0	8.8	12.6	5.6	.4	.0	27.4	.2	3.1	6.4	1.2	.2	.0	11.1	100.0

PERIOD: (PRIMARY)  
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TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)								TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+			
<1	3.2	4.4	.0	.0	.0	.0			38
1-2	.4	11.2	7.8	.0	.0	.0			97
3-4	.4	8.8	15.8	2.8	.0	.0			139
5-6	.6	4.2	14.6	4.0	.2	.0			118
7	.0	.6	4.6	2.2	.6	.0			40
8-9	.0	.4	2.6	3.0	.0	.0			30
10-11	.0	.0	2.0	1.8	.0	.0			14
12	.0	.0	.4	1.2	.2	.0			4
13-16	.0	.0	.6	1.4	.4	.0			12
17-19	.0	.0	.0	.6	.2	.0			4
20-22	.0	.0	.0	.0	.0	.0			0
23-25	.0	.0	.0	.0	.0	.0			0
26-32	.0	.0	.0	.0	.0	.0			0
33-40	.0	.0	.0	.0	.0	.0			0
41-48	.0	.0	.0	.0	.0	.0			0
49-60	.0	.0	.0	.0	.0	.0			0
61-70	.0	.0	.0	.0	.0	.0			0
71-86	.0	.0	.0	.0	.0	.0			0
87+	.0	.0	.0	.0	.0	.0			0
TOTAL	23	148	242	80	8	0			501
PCT	4.6	29.5	48.3	16.0	1.6	.0			100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.8	9.1	19.9	9.7	2.4	1.5	1.1	.2	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	252	3
6-7	.0	2.4	4.2	7.7	5.5	3.3	1.6	.7	2.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	152	6
8-9	.0	.2	1.1	2.6	2.2	1.5	1.8	.5	.9	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	60	7
10-11	.0	.0	.5	.2	.2	2.0	.4	.2	.9	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	25	8
12-13	.0	.0	.0	.0	.0	.2	.4	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	4	12
>13	.0	.0	.0	.2	.2	.0	.0	.2	.2	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	5	11
INDET	8.0	.0	.4	.2	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	49	0
TOTAL	54	64	143	112	58	47	29	10	23	5	2	0	0	0	0	0	0	0	0	547	4
PCT	9.9	11.7	26.1	20.5	10.6	8.6	5.3	1.8	4.2	.9	.4	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

SEPTEMBER

PERIOD: (PRIMARY) 1953-1969  
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TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN SHWR	RAIN SHWR	PRECIPITATION TYPE			HAIL	PCT FREQ		TOTAL PCPN	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
			DRZL	FRZG PCPN	FRZG PCPN		PCPN AT OB TIME	PCPN			FOG PCPN	SMOKE	DUST BLWG	DUST BLWG	
N	.3	.0	.1	.0	.0	.0	.4	.0	6	.0	.0	.0	.0	.0	63
NNE	.1	.2	.1	.0	.0	.0	.4	.0	6	.0	.1	.0	.0	.0	38
NE	.5	.0	.3	.0	.0	.0	.8	.0	11	.0	.2	.1	.0	.0	37
ENE	.4	.0	.4	.0	.0	.0	.8	.0	11	.0	.1	.0	.0	.0	24
E	1.2	.0	.7	.0	.0	.0	1.8	.0	25	.0	.5	.0	.0	.0	74
ESE	1.1	.0	.6	.0	.0	.0	1.7	.0	23	.0	.2	.0	.0	.0	53
SE	.9	.0	.5	.0	.0	.0	1.3	.0	18	.0	1.2	.1	.0	.0	78
SSE	.7	.0	.5	.0	.0	.0	1.2	.0	16	.0	1.7	.0	.0	.0	65
S	.9	.1	.5	.0	.0	.0	1.5	.0	21	.0	2.8	.0	.0	.0	131
SSW	.2	.0	.2	.0	.0	.0	.4	.0	6	.0	.6	.0	.0	.0	55
SW	.8	.1	.3	.0	.0	.0	1.2	.0	16	.0	.7	.0	.0	.0	107
WSW	.6	.1	.5	.0	.0	.0	1.2	.0	16	.1	.3	.0	.0	.0	105
W	1.1	.0	.5	.0	.0	.0	1.6	.0	22	.1	.2	.1	.0	.0	174
WNW	.3	.1	.2	.0	.0	.0	.5	.0	7	.0	.0	.1	.0	.0	137
NW	1.1	.0	.5	.0	.0	.0	1.5	.0	21	.0	.1	.0	.0	.0	122
NNW	.4	.0	.1	.0	.0	.0	.5	.0	7	.0	.0	.0	.0	.0	77
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
CALM	.1	.0	.2	.0	.0	.0	.4	.0	5	.0	.0	.0	.0	.0	34
TOT OBS	147	8	86	0	0	0	17.2	0	237	2	119	8	0	1008	1374
TOT PCT	10.7	.6	6.3	.0	.0	.0		.0		.1	8.7	.6	.0	73.4	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN SHWR	RAIN SHWR	PRECIPITATION TYPE			HAIL	PCT FREQ		TOTAL PCPN	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
			DRZL	FRZG PCPN	FRZG PCPN		PCPN AT OB TIME	PCPN			FOG PCPN	SMOKE	DUST BLWG	DUST BLWG	
00003	9.2	1.1	5.8	.0	.0	.0	15.8	.0	60	.3	9.2	.5	.0	.0	379
06009	9.8	1.1	6.7	.0	.0	.0	17.6	.0	63	.0	8.9	.3	.0	.0	358
12015	10.8	.6	6.7	.0	.0	.0	17.5	.0	55	.0	6.7	.0	.0	.0	315
18021	12.7	.6	5.6	.0	.0	.0	18.6	.0	63	.3	9.7	1.5	.0	.0	339
TOT	147	12	86	0	0	0	17.3	0	241	2	121	8	0	1019	1391
PCT	10.6	.9	6.2	.0	.0	.0		.0		.1	8.7	.6	.0	.0	73.3



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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)					
	0-3	4-10	11-21	22-33	34-47	48+	TOTAL OBS	PCT FREQ	MEAN SPD		00	03	06	09	12	15
N	.2	.7	2.6	.9	.2	.0	79	4.5	16.8		5.2	9.8	4.0	.0	4.3	3.8
NNE	.2	1.3	.9	.4	.0	.0	49	2.8	12.7		2.9	.0	2.7	.0	3.4	5.0
NE	.3	.8	1.2	.4	.1	.0	50	2.8	14.6		2.9	3.9	2.2	3.2	4.3	2.9
ENE	.1	.6	.7	.3	.2	.0	34	1.9	16.8		1.0	2.0	2.2	3.2	2.7	1.9
E	.2	1.4	1.7	1.2	.3	.0	85	4.8	17.2		4.2	5.9	6.9	8.1	3.7	.0
ESE	.2	.5	2.0	.8	.0	.0	62	3.5	16.3		3.2	2.0	4.2	.0	2.4	5.8
SE	.2	1.8	2.7	.5	.1	.0	92	5.2	13.3		6.4	9.8	4.2	12.9	5.2	1.9
SSE	.0	1.2	2.1	1.3	.2	.0	84	4.8	18.1		2.9	2.0	4.0	9.7	6.4	6.0
S	.1	2.2	4.9	1.5	.4	.0	159	9.0	16.9		9.8	5.9	8.4	3.2	5.8	15.4
SSW	.1	1.0	1.8	.7	.2	.0	67	3.8	16.5		3.9	.0	3.7	3.2	3.4	1.9
SW	.1	3.0	3.4	1.3	.1	.0	138	7.2	15.1		8.8	2.0	9.7	3.2	9.1	3.8
WSW	.2	2.2	3.8	1.0	.2	.0	127	7.2	15.1		8.6	7.8	6.7	4.8	7.6	6.3
W	.1	4.4	6.4	2.7	.3	.0	244	13.9	15.9		15.7	17.6	11.4	16.1	13.1	14.1
WNW	.1	2.3	6.4	1.9	.4	.0	196	11.1	16.6		9.6	15.7	10.9	12.9	12.8	11.5
NW	.2	1.6	4.9	2.2	.2	.0	160	9.1	17.5		9.6	9.8	8.2	11.3	9.5	10.4
NNW	.3	1.3	2.4	1.1	.3	.0	94	5.3	17.3		3.2	5.9	7.7	8.1	4.3	9.1
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0		.0	.0	.0	.0	.0	5.5
CALM	2.2	458	844	318	57	0	38	2.2	.0		2.0	.0	2.7	.0	2.1	5.8
TOT OBS	81	26.1	48.0	18.1	3.2	0	1758	100.0	15.8		407	51	403	62	328	52
TOT PCT	4.6										100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)					
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD			00	03	06	09	12	15
N	1.3	3.0	2.5	.5	.0	128	7.3	15.2			8.1	9.8	6.7	.0	7.6	7.7
NE	.8	2.2	1.4	.2	.2	84	4.8	15.5			3.9	5.9	4.5	6.5	7.0	3.8
E	1.2	3.4	2.9	.8	.1	147	8.4	16.8			7.4	7.8	11.2	8.1	6.1	5.8
SE	1.3	4.6	3.1	1.0	.0	176	10.0	15.6			9.3	11.8	8.2	22.6	11.6	7.7
S	1.1	6.1	4.2	1.3	.2	226	12.9	16.8			13.8	5.9	12.2	6.5	9.1	17.3
SW	1.9	7.7	4.7	.8	.0	265	15.1	14.9			17.4	9.8	16.4	8.1	16.8	15.1
W	2.0	12.8	7.8	2.2	.2	440	25.0	16.2			25.3	33.3	22.3	29.0	25.9	17.3
NW	1.5	5.3	6.1	1.3	.2	254	14.4	17.4			12.8	15.7	15.9	19.4	13.7	14.6
VAR	.0	.0	.0	.0	.0	0	.0	.0			.0	.0	.0	.0	.0	.0
CALM	2.2	792	575	142	16	38	2.2	.0			2.0	.0	2.7	.0	2.1	5.8
TOT OBS	233	45.1	32.7	8.1	.9	1758	100.0	15.8			407	51	403	62	328	52
TOT PCT	13.3										100.0	100.0	100.0	100.0	100.0	100.0

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TABLE 4

HOUR	PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)							PCT		TOTAL OBS
	1-3	4-10	11-21	WIND SPEED (KNOTS)			CALM	MEAN	FREQ	
				22-33	34-47	48+				
00003	2.4	27.9	45.0	19.2	3.7	.0	1.7	16.0	100.0	458
06009	2.4	24.9	49.7	17.8	2.8	.0	2.4	15.8	100.0	465
12015	2.6	25.0	52.1	15.5	2.1	.0	2.6	15.1	100.0	380
18021	2.4	26.2	45.9	19.3	4.2	.0	2.0	16.2	100.0	455
TOT	43	458	844	318	57	0	38	15.8		1758
PCT	2.4	26.1	48.0	18.1	3.2	.0	2.2		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION								MEAN CLOUD COVER
	0-2	3-4	5-7	8-10	11-15	16-20	21-25	26-30	
N	.9	.9	1.3	1.3	59	5.3			
NNE	.1	.2	.7	1.5	35	6.8			
NE	.3	.3	.4	1.6	36	6.6			
ENE	.1	.2	.4	1.0	24	6.8			
E	.1	.2	.4	4.0	63	7.5			
ESE	.0	.0	.5	3.0	47	7.7			
SE	.1	.6	1.0	3.1	65	7.0			
SSE	.0	.1	1.0	2.4	47	7.4			
S	.1	.5	2.0	6.1	117	7.3			
SSW	.2	.2	1.4	2.0	52	6.7			
SW	.4	.5	3.1	3.6	103	6.6			
WSW	.8	.3	3.0	3.4	100	6.4			
W	1.6	1.9	6.6	4.1	189	5.8			
WNW	2.2	1.5	5.3	3.0	161	5.4			
NW	1.7	1.9	3.5	2.1	124	5.2			
NNW	1.3	1.0	1.9	1.7	80	5.2			
VAR	.0	.0	.0	.0	0	.0			
CALM	.7	.3	.3	1.2	33	5.3			
TOT OBS	145	145	440	605	1335	6.2			
TOT PCT	10.9	10.9	33.0	45.3	100.0				

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

WIND DIR	AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION															TOTAL OBS
	000	149	150	299	300	599	600	699	1000	2000	3499	4999	5000	6499	7999	
N	.1	.0	.0	.0	.3	.4	.4	.5	.7	.7	.3	.1	.0	.0	.0	59
NNE	.2	.0	.0	.0	.1	.7	.7	.8	.5	.4	.4	.2	.1	.0	.0	35
NE	.5	.0	.0	.0	.3	.3	.3	.8	.0	.0	.0	.0	.0	.0	.0	36
ENE	.2	.1	.1	.1	.1	.3	.8	.5	.1	.1	.4	.1	.0	.0	.0	24
E	1.0	.1	.1	.1	.4	.8	.7	.8	.4	.3	.4	.1	.0	.0	.0	63
ESE	.6	.1	.1	.1	.5	.7	.7	.7	.3	.7	.3	.1	.0	.0	.0	47
SE	.4	.4	.4	.4	.4	.5	.5	.7	.7	.7	.7	.1	.0	.0	.0	65
SSE	.7	.1	.1	.1	.4	.3	.3	.6	.4	.4	.4	.0	.0	.0	.0	47
S	1.7	.2	.2	.2	.1	1.4	1.5	.6	1.2	1.2	1.2	.2	.2	.2	.2	117
SSW	.6	.5	.0	.0	.1	.4	.8	.8	.5	.5	.5	.1	.0	.0	.0	52
SW	.5	.3	.3	.3	.1	.9	1.5	1.8	1.6	1.6	1.6	.4	.0	.0	.0	103
WSW	.3	.1	.1	.1	.1	1.0	1.8	1.1	1.1	1.1	1.1	.2	.0	.0	.0	100
W	.4	.1	.1	.1	.4	1.2	3.4	2.2	3.2	2.2	2.2	.3	.0	.0	.0	189
WNW	.1	.0	.0	.0	.1	1.3	1.9	1.6	1.6	1.6	1.6	.1	.2	.1	.0	161
NW	.1	.1	.1	.1	.1	1.2	1.6	1.1	1.1	1.1	1.1	.1	.0	.0	.0	124
NNW	.3	.0	.0	.0	.0	.4	1.0	1.1	1.1	1.1	1.1	.1	.0	.0	.0	80
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.6	.0	.0	.0	.0	.2	.5	.5	.5	.5	.5	.0	.0	.0	.0	33
TOT OBS	111	20	20	20	48	160	261	211	32	15.8	2.4	.4	.4	.4	.4	1335
TOT PCT	8.3	1.5	1.5	1.5	3.6	12.0	19.6	15.8	2.4	1.5	33.6	1.4	1.4	1.4	1.4	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)									
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0		
= OR >6500	1.3	1.6	1.8	2.8	2.9	2.9	2.9	2.9	2.9	2.9
= OR >5000	1.7	1.9	2.2	3.2	3.3	3.3	3.3	3.3	3.3	3.3
= OR >3500	3.7	4.3	4.6	5.6	5.7	5.7	5.7	5.7	5.7	5.7
= OR >2000	11.4	19.2	20.3	21.3	21.5	21.5	21.5	21.5	21.5	21.5
= OR >1000	23.0	37.7	39.7	40.9	41.0	41.2	41.2	41.2	41.2	41.2
= OR >600	28.8	47.3	50.6	52.5	53.0	53.1	53.2	53.2	53.2	53.2
= OR >300	29.9	49.3	53.7	56.0	56.5	56.7	56.8	56.8	56.8	56.8
= OR >150	30.3	50.1	55.0	57.3	57.8	58.1	58.2	58.2	58.2	58.2
= OR > 0	30.5	51.3	57.7	61.7	63.7	65.4	66.5	66.6	66.6	66.6
TOTAL	410	691	777	831	858	880	895	896	896	896

TOTAL NUMBER OF OBS: 1346

PCT FREQ NH <5/8: 33.4

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
3.5	5.0	9.2	9.4	6.4	7.1	11.6	11.4	28.8	7.5	1388	

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.0	.1	.1	.0	.2	.1	.0	.1	.1	.1	.0	.1	.0	.0	.0	.0	.0	.1	14	1.0
NO PCP	.0	.1	.1	.0	.1	.1	.1	.4	1.0	.4	.4	.1	.1	.0	.1	.0	.0	.1	44	3.2
TOTAL	0	2	2	0	5	3	2	8	15	6	6	3	2	0	1	0	0	3	58	4.2
PCP	.0	.0	.1	.0	.1	.3	.0	.2	.4	.0	.1	.1	.0	.0	.0	.0	.0	.0	19	1.4
NO PCP	.0	.0	.1	.0	.2	.0	.1	.3	1.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	25	1.8
TOTAL	0	0	2	0	4	4	2	7	19	1	3	2	0	0	0	0	0	0	44	3.2
PCP	.0	.1	.2	.1	.3	.1	.6	.4	.1	.2	.2	.1	.1	.0	.0	.0	.0	.1	37	2.7
NO PCP	.0	.1	.0	.0	.2	.0	.4	.5	.6	.1	.0	.1	.1	.0	.1	.1	.0	.1	30	2.2
TOTAL	0	2	3	2	7	1	13	12	9	4	3	3	3	0	1	1	0	3	67	4.9
PCP	.2	.1	.2	.4	.5	.9	.1	.1	.4	.0	.1	.0	.2	.1	.3	.0	.0	.0	51	3.7
NO PCP	.1	.0	.1	.0	.6	.4	.5	.7	1.0	.1	.5	.1	.1	.2	.1	.1	.0	.0	64	4.7
TOTAL	4	2	5	5	15	17	9	12	18	1	8	1	5	5	6	2	0	0	115	8.4
PCP	.1	.1	.2	.1	.6	.1	.4	.2	.5	.1	.7	.4	1.0	.2	1.0	.5	.0	.0	85	6.2
NO PCP	1.2	.3	.6	.4	1.0	.5	1.2	1.0	1.8	1.2	2.2	1.8	2.9	3.1	1.5	1.5	.0	.4	307	22.4
TOTAL	18	5	11	7	21	8	22	16	32	18	39	30	54	45	33	28	0	5	392	28.7
PCP	.1	.1	.0	.2	.1	.2	.0	.1	.1	.0	.1	.3	.3	.1	.3	.0	.0	.1	29	2.1
NO PCP	2.9	1.9	1.0	.4	1.5	1.2	2.0	.7	2.7	1.8	3.4	4.5	7.7	6.2	5.6	3.4	.0	1.6	663	48.5
TOTAL	41	27	14	9	22	19	28	10	38	25	48	65	110	87	80	46	0	23	692	50.6
TOTAL PCT	63 4.6	38 2.8	37 2.7	23 1.7	74 5.4	52 3.8	76 5.6	65 4.8	131 9.6	55 4.0	107 7.8	104 7.6	174 12.7	137 10.0	121 8.8	77 5.6	0	34 2.5	1368 100.0	

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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.2	5	.3
	4-10	.0	.1	.1	.0	.1	.1	.1	.1	.3	.1	.2	.1	.1	.0	.0	.0	.0	.0	21	1.2
	11-21	.0	.1	.0	.0	.0	.1	.1	.1	.4	.2	.1	.1	.0	.0	.0	.0	.0	.0	23	1.3
	22+	.0	.0	.1	.0	.2	.0	.0	.0	.1	.0	.0	.1	.1	.0	.1	.0	.0	.0	10	.6
	TOTAL	0	2	2	0	5	3	2	8	15	6	6	3	2	0	1	0	0	4	59	3.4
1/2<1	0-3	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	2	.1
	4-10	.0	.0	.1	.0	.1	.1	.0	.0	.1	.0	.1	.1	.0	.0	.0	.0	.0	.0	8	.5
	11-21	.0	.0	.0	.0	.0	.1	.1	.2	1.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	26	1.5
	22+	.0	.0	.1	.0	.1	.1	.1	.2	.0	.1	.1	.0	.0	.0	.1	.0	.0	.0	11	.6
	TOTAL	0	0	2	0	4	4	2	7	19	2	3	2	0	0	1	0	0	1	47	2.7
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	3	.2
	4-10	.0	.1	.0	.0	.0	.0	.1	.1	.1	.0	.1	.1	.1	.0	.0	.0	.0	.0	8	.5
	11-21	.0	.0	.1	.0	.1	.0	.6	.3	.2	.1	.1	.2	.1	.0	.0	.1	.0	.0	29	1.7
	22+	.0	.1	.1	.1	.4	.1	.1	.3	.3	.2	.1	.0	.0	.0	.1	.0	.0	.0	31	1.8
	TOTAL	0	2	3	2	8	1	13	12	9	5	3	4	3	0	2	1	0	3	71	4.1
2<5	0-3	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	2	.1
	4-10	.1	.0	.1	.1	.1	.1	.1	.2	.1	.0	.0	.1	.0	.0	.0	.0	.0	.0	15	.9
	11-21	.2	.1	.1	.2	.4	.6	.4	.7	.7	.0	.3	.0	.2	.2	.2	.1	.0	.0	65	3.7
	22+	.0	.1	.1	.1	.4	.3	.1	.4	.4	.1	.2	.0	.2	.2	.1	.1	.0	.0	48	2.8
	TOTAL	4	2	6	7	16	17	9	14	21	1	9	1	7	7	6	3	0	0	130	7.5
5<10	0-3	.0	.0	.1	.0	.0	.0	.1	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.3	10	.6
	4-10	.2	.1	.2	.0	.5	.1	.3	.2	.5	.2	1.1	.7	1.1	.6	.4	.3	.0	.0	114	6.6
	11-21	.7	.2	.4	.3	.6	.5	.7	.4	1.2	.5	1.0	1.0	1.8	1.7	1.6	1.3	.0	.0	242	13.9
	22+	.4	.1	.1	.2	.3	.1	.3	.5	.5	.3	.6	.3	1.0	.6	.7	.5	.0	.0	116	6.7
	TOTAL	24	6	13	8	24	11	25	19	39	18	46	38	67	51	49	38	0	6	482	27.7
10+	0-3	.2	.2	.2	.1	.2	.2	.1	.0	.1	.1	.1	.1	.1	.1	.1	.2	.0	1.4	59	3.4
	4-10	.5	1.1	.3	.5	.6	.3	1.2	.6	1.0	.6	1.6	1.2	3.2	1.8	1.2	.9	.0	.0	284	16.3
	11-21	1.6	.6	.6	.2	.7	.7	.9	.5	1.5	1.0	2.0	2.5	4.4	4.6	3.1	1.0	.0	.0	449	25.8
	22+	.6	.2	.2	.1	.1	.2	.0	.1	.6	.2	.5	.7	1.8	1.5	1.3	.8	.0	.0	158	9.1
	TOTAL	50	37	23	16	27	24	37	20	55	33	71	78	165	138	100	52	0	24	950	54.6
	TOTAL	78	49	49	33	84	60	88	80	158	65	138	126	244	196	159	94	0	38	1739	100.0
	PCT	4.5	2.8	2.8	1.9	4.8	3.5	5.1	4.6	9.1	3.7	7.9	7.2	14.0	11.3	9.1	5.4	.0	2.2	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8), AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL ANY HGT	NH <5/8 TOTAL OBS
00003	6.8	2.1	3.1	12.0	18.0	18.5	2.1	.3	.5	1.3	64.8	35.2	383
06009	9.1	1.4	3.1	12.9	17.7	18.3	2.6	.3	2.0	.6	68.0	32.0	350
12015	10.5	1.3	3.0	10.8	18.7	10.2	2.6	.3	2.0	2.3	61.6	38.4	305
18021	7.6	.9	4.9	11.3	23.8	14.3	2.4	.6	1.2	1.8	68.9	31.1	328
TOT	115	20	48	161	266	213	33	5	19	20	900	466	1366
PCT	8.4	1.5	3.5	11.8	19.5	15.6	2.4	.4	1.4	1.5	65.9	34.1	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	2.1	1.9	3.7	5.6	21.5	65.2	376
06009	4.3	1.7	4.0	4.6	28.9	56.4	346
12015	2.0	1.3	6.0	8.4	29.4	52.8	299
18021	2.8	3.4	3.1	8.3	27.7	54.8	325
TOT	38	28	56	89	359	776	1346
PCT	2.8	2.1	4.2	6.6	26.7	57.7	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET, NH >4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00003	6.6	12.2	26.6	39.6	33.8	376
06009	9.2	14.2	30.3	38.4	31.2	346
12015	10.4	15.4	31.1	31.8	37.1	299
18021	8.0	15.4	29.8	40.0	30.2	325
TOT	114	191	395	507	444	1346
PCT	8.5	14.2	29.3	37.7	33.0	100.0

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TABLE 13

TEMP F	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP								TOTAL OBS	PCT FREQ
	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100		
65/69	.0	.0	.0	.0	.0	.1	.0	.0	1	.1
60/64	.0	.0	.0	.4	.4	.2	.1	.1	18	1.3
55/59	.0	.0	.0	.1	.7	2.2	3.6	3.3	138	10.0
50/54	.0	.0	.0	.3	2.4	7.0	20.7	23.8	751	54.3
45/49	.0	.0	.0	.0	1.5	6.3	10.5	14.5	453	32.7
40/44	.0	.0	.0	.0	.1	.4	.4	.7	22	1.6
35/39	.0	.0	.0	.0	.0	.0	.0	.1	1	.1
TOTAL	0	0	0	12	71	223	490	588	1384	100.0
PCT	.0	.0	.0	.9	5.1	16.1	35.4	42.5		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP												
NE	E	SE	S	SW	W	NW	VAR	CALM				
.0	.0	.0	.0	.0	.1	.0	.0	.0				
.0	.0	.2	.0	.0	.7	.2	.0	.1				
.2	1.0	1.4	2.4	1.2	1.8	.7	.0	.0				
3.4	5.2	5.7	8.9	9.0	12.1	5.3	.0	.0				
1.4	1.7	1.7	1.2	4.6	10.7	8.0	.0	.0		1.1		
.1	.1	.0	.1	.1	.4	.7	.0	.1		.8		
.0	.0	.0	.0	.0	.1	.0	.0	.0		.1		
70	110	125	174	206	356	206	.0	.0		.0		
5.1	7.9	9.0	12.6	14.9	25.7	14.9	.0	.0		33		
										2.4		

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR										
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS	
0003	64	63	59	52	46	45	41	52.0	461	
0609	61	60	55	50	46	43	39	50.4	472	
1215	58	56	55	50	45	43	39	49.9	387	
1821	65	58	55	50	45	43	41	50.5	452	
TOT	65	61	56	50	46	43	39	50.7	1772	

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR								TOTAL OBS
HOUR (GMT)	0-29	30-59	60-69	70-79	80-89	90-100	MEAN	
0003	.0	2.2	7.2	20.4	33.4	36.7	85	362
0609	.0	.5	4.8	13.7	36.2	44.8	87	373
1215	.0	.0	3.0	16.2	38.4	42.4	87	302
1821	.0	.5	4.9	14.2	34.1	46.3	87	367
TOT	0	12	71	226	497	598	87	1404

PERIOD: (PRIMARY) 1953-1969  
(OVER-ALL) 1908-1969

SEPTEMBER

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	37	41	45	49	53	57	61	TOT	W FOG	WU FOG
11/13	.0	.0	.0	.0	.0	.1	.5	7	.0	.6
9/10	.0	.0	.0	.0	.0	.3	.2	6	.1	.4
7/8	.0	.0	.0	.0	.9	.4	.2	19	.3	1.2
6	.0	.0	.0	.3	.3	.1	.1	10	.3	.5
5	.0	.0	.0	.6	2.2	.6	.1	43	.4	3.0
4	.0	.0	.2	1.8	2.4	.5	.0	62	1.1	3.8
3	.0	.0	.0	2.1	3.0	.5	.0	70	1.0	4.5
2	.0	.0	.7	4.2	3.9	.4	.1	117	1.4	7.8
1	.0	.0	1.2	5.0	3.5	.2	.0	125	.8	9.1
0	.0	.0	3.2	9.8	2.4	.2	.0	196	1.3	14.2
-1	.0	.0	1.9	6.1	1.3	.1	.0	119	.6	8.8
-2	.0	.2	3.7	5.4	1.3	.0	.0	134	.5	10.1
-3	.0	.2	4.0	4.9	.6	.0	.0	124	.4	9.4
-4	.0	.6	3.7	2.4	.2	.0	.0	87	.2	6.6
-5	.1	.2	1.4	1.7	.2	.0	.0	45	.2	3.4
-6	.0	.2	.5	.8	.1	.0	.0	19	.1	1.4
-7/-8	.0	.9	1.4	1.1	.2	.0	.0	45	.2	3.4
-9/-10	.1	.2	1.0	.9	.0	.0	.0	28	.0	2.2
-11/-13	.1	.1	.5	.2	.0	.0	.0	10	.1	.7
-14/-16	.0	.0	.2	.0	.0	.0	.0	2	.0	.2
TOTAL	3	31	298	596	286	41	13	1268	113	1155
PCT	.2	2.4	23.5	47.0	22.6	3.2	1.0	100.0	8.9	91.1



PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.0	1.1	.0	.0	.0	.0	6	.0	.4	.0	.0	.0	.0	2
1-2	.0	.6	.7	.0	.0	.0	7	.0	.4	.6	.0	.0	.0	5
3-4	.0	.7	1.9	.0	.0	.0	14	.0	.2	.4	.0	.0	.0	3
5-6	.0	.0	1.3	.2	.2	.0	9	.0	.2	.6	.0	.0	.0	4
7	.0	.0	.2	.7	.0	.0	5	.0	.0	.0	.4	.2	.0	3
8-9	.0	.0	.6	.7	.0	.0	7	.0	.0	.0	.0	.2	.0	1
10-11	.0	.0	.2	.2	.4	.0	4	.0	.0	.0	.2	.0	.0	1
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
13-16	.0	.0	.0	.2	.0	.0	1	.0	.0	.0	.0	.0	.0	0
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	0	13	26	11	3	0	53	0	6	8	3	2	0	19
PCT	.0	2.4	4.8	2.0	.6	.0	9.8	.0	1.1	1.5	.6	.4	.0	3.5

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.0	.0	.0	.0	.0	.0	0	.0	.9	.0	.0	.0	.0	5
1-2	.2	.4	.2	.0	.0	.0	4	.0	.6	.6	.0	.0	.0	6
3-4	.0	.7	1.3	.6	.0	.0	14	.0	.2	1.7	.2	.0	.0	11
5-6	.0	.7	1.5	.2	.0	.0	13	.0	.0	.9	.4	.0	.0	7
7	.0	.0	.2	.6	.4	.0	6	.0	.0	1.1	.4	.0	.0	8
8-9	.0	.0	.0	.4	.0	.0	2	.0	.0	.0	.0	.2	.0	1
10-11	.0	.0	.2	.2	.0	.0	2	.0	.0	.0	.0	.0	.0	0
12	.0	.0	.0	.2	.0	.0	1	.0	.0	.0	.0	.0	.0	0
13-16	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
17-19	.0	.0	.0	.0	.2	.0	1	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	1	10	18	11	3	0	43	0	9	23	5	1	0	38
PCT	.2	1.9	3.3	2.0	.6	.0	8.0	.0	1.7	4.3	.9	.2	.0	7.0

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.0	.0	.0	.0	.0	.0	.0	.2	.6	.0	.0	.0	.0	.4
1-2	.0	1.3	.7	.0	.0	.0	11	.4	1.1	1.1	.0	.0	.0	14
3-4	.0	1.1	1.1	.4	.0	.0	14	.0	.9	1.3	.4	.0	.0	14
5-6	.0	.0	2.2	.4	.0	.0	14	.0	1.1	3.5	1.1	.0	.0	31
7	.0	.0	1.1	.4	.0	.0	8	.0	.0	1.1	.4	.0	.0	8
8-9	.0	.0	.2	.6	.0	.0	4	.0	.0	.6	.0	.0	.0	3
10-11	.0	.0	.2	.2	.0	.0	2	.0	.0	.2	.0	.0	.0	1
12	.0	.0	.2	.0	.2	.0	2	.0	.0	.2	.4	.2	.0	4
13-16	.0	.0	.0	.4	.0	.0	2	.0	.0	.0	.0	.2	.0	1
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	0	13	31	12	1	0	57	3	20	43	12	2	0	80
PCT	.0	2.4	5.7	2.2	.2	.0	10.6	.6	3.7	8.0	2.2	.4	.0	14.8

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	GRAND TOTAL
<1	.2	1.3	.0	.0	.0	.0	8	.2	.7	.0	.0	.0	.0	5	30
1-2	.0	2.6	2.2	.0	.0	.0	26	.2	1.7	1.5	.0	.0	.0	18	91
3-4	.0	3.0	2.0	.4	.0	.0	29	.0	1.1	3.3	1.3	.0	.0	31	130
5-6	.0	2.0	3.5	1.1	.4	.0	38	.0	.2	2.0	2.0	.2	.0	24	140
7	.0	.0	.9	2.0	.0	.0	16	.0	.4	1.7	1.3	.0	.0	18	72
8-9	.0	.0	.7	.7	.0	.0	8	.0	.2	.6	1.1	.2	.0	11	37
10-11	.0	.2	.0	.2	.2	.0	6	.0	.0	.0	.4	.0	.0	2	18
12	.0	.0	.4	.2	.4	.0	4	.0	.0	.0	.2	.2	.0	1	12
13-16	.0	.0	.0	.2	.0	.0	3	.0	.0	.0	.0	.0	.0	2	9
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	1
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
TOTAL	1	49	53	29	6	0	138	2	23	49	35	3	0	112	540
PCT	.2	9.1	9.8	5.4	1.1	.0	25.6	.4	4.3	9.1	6.5	.6	.0	20.7	100.0

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1969

SEPTEMBER

AREA 0007 UNIMAK  
53N-CUAST 157-165W

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)								TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+			
<1	2.5	4.9	.0	.0	.0	.0			41
1-2	.7	8.3	7.4	.0	.0	.0			91
3-4	.0	7.8	12.7	3.1	.0	.0			130
5-6	.0	4.2	15.2	5.3	.7	.0			140
7	.0	.4	6.2	6.0	.5	.0			72
8-9	.0	.2	2.5	3.4	.5	.0			37
10-11	.0	.2	.7	1.8	.5	.0			18
12	.0	.0	.7	.9	.5	.0			12
13-16	.0	.0	.0	.9	.7	.0			9
17-19	.0	.0	.0	.0	.2	.0			1
20-22	.0	.0	.0	.0	.0	.0			0
23-25	.0	.0	.0	.0	.0	.0			0
26-32	.0	.0	.0	.0	.0	.0			0
33-40	.0	.0	.0	.0	.0	.0			0
41-48	.0	.0	.0	.0	.0	.0			0
49-60	.0	.0	.0	.0	.0	.0			0
61-70	.0	.0	.0	.0	.0	.0			0
71-86	.0	.0	.0	.0	.0	.0			0
87+	.0	.0	.0	.0	.0	.0			0
TOTAL	18	143	251	118	21	0			551
PCT	3.3	26.0	45.6	21.4	3.8	.0			100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+ TOTAL	MEAN HGT	
<6	1.3	8.4	14.2	10.8	4.1	.9	.2	.3	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	260	4
6-7	.2	.8	7.1	8.7	7.3	3.6	2.2	.9	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	198	5
8-9	.0	.3	.6	3.3	3.6	1.4	1.1	.6	1.4	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	80	7
10-11	.0	.2	.2	.6	.9	.9	1.1	.3	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	37	9
12-13	.0	.0	.0	.0	.6	.2	.6	.6	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	14	9
>13	.0	.0	.0	.0	.0	.3	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	9
INDET	5.5	.0	.3	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	40	0
TOTAL	.44	61	142	148	105	47	33	21	30	1	0	0	0	0	0	0	0	0	0	632	5
PCT	7.0	9.7	22.5	23.4	16.6	7.4	5.2	3.3	4.7	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

OCTOBER

PERIOD: (PRIMARY) 1951-1969  
(OVER-ALL) 1906-1969

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL DBS
				FRZG PCPN	SNOW	OTHER PCPN					FOG WD PCPN	SMOKE	DUST	SIG	
N	.4	.0	.5	.0	.2	.0	.0	1.1	11	.0	.0	.0	.0	5.6	58
NNE	.4	.0	.3	.0	.0	.0	.0	.7	7	.0	.0	.0	.0	2.2	30
NE	.7	.1	.2	.0	.0	.0	.0	1.0	10	.0	.0	.0	.0	1.9	30
ENE	.7	.0	.0	.0	.0	.0	.0	.7	7	.0	.0	.0	.0	1.8	25
E	.7	.1	.4	.0	.0	.0	.0	1.1	11	.0	.1	.0	.0	3.9	52
ESE	.5	.1	.1	.0	.0	.0	.0	.7	7	.0	.0	.0	.0	1.9	26
SE	.5	.1	.2	.0	.0	.0	.0	.8	8	.0	.2	.0	.0	1.9	29
SSE	1.0	.1	.3	.0	.0	.0	.0	1.4	14	.0	.0	.0	.0	1.5	29
S	.9	.1	1.0	.0	.0	.0	.0	1.9	20	.0	.2	.0	.0	3.3	56
SSW	.4	.2	.0	.0	.0	.0	.0	.6	6	.0	.0	.0	.0	3.2	39
SW	1.7	.4	1.0	.0	.0	.0	.0	2.5	26	.0	.2	.0	.0	4.1	70
WSW	1.0	.2	.6	.0	.1	.0	.0	1.5	15	.0	.5	.1	.0	6.2	85
W	.5	.2	.4	.0	.3	.0	.1	1.5	15	.0	.0	.0	.0	15.4	173
WNW	.1	.0	.1	.0	.0	.0	.0	.2	2	.0	.0	.0	.0	8.1	85
NW	.8	.1	.0	.0	.1	.0	.1	1.1	11	.0	.0	.0	.0	11.5	129
NNW	.5	.0	.1	.0	.0	.0	.0	.6	6	.0	.0	.0	.0	7.9	87
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	1.3	13
TOT DBS	108	17	52	0	7	0	2	17.2	176	0	12	1	0	837	1026
TOT PCT	10.5	1.7	5.1	.0	.7	.0	.2			.0	1.2	.1	.0	81.6	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL DBS
				FRZG PCPN	SNOW	OTHER PCPN					FOG WD PCPN	SMOKE	DUST	SIG	
00003	5.7	.7	3.6	.0	1.1	.0	.0	11.1	31	.0	2.2	.0	.0	86.7	279
06009	10.3	2.4	4.8	.0	.4	.0	.4	17.5	44	.0	1.2	.0	.0	81.3	252
12015	15.3	1.6	6.5	.0	.8	.0	.4	23.0	57	.0	.0	.4	.0	76.6	248
18021	10.9	2.0	5.5	.0	.4	.0	.0	17.2	44	.0	1.2	.0	.0	81.6	256
TOT	108	17	52	0	7	0	2	17.0	176	0	12	1	0	846	1035
PCT	10.4	1.6	5.0	.0	.7	.0	.2			.0	1.2	.1	.0	81.7	100.0

OCTOBER

PERIOD: (PRIMARY) 1951-1969  
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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-3	4-10	11-21	22-33	34-47	48+	TOTAL OBS	PCT FREQ	MEAN SPD	00	03	06	09	12	15
N	.1	1.9	2.5	1.9	.8	.1	98	7.3	20.0	7.3	10.3	7.0	4.8	6.7	20.0
NNE	.0	1.0	.9	.7	.1	.1	37	2.8	18.5	2.7	3.4	3.5	.0	3.5	8.0
NE	.0	.6	1.2	.4	.4	.0	35	2.6	19.4	1.2	.0	3.8	4.8	5.5	.0
ENE	.0	.7	.7	.4	.1	.0	27	2.0	18.1	2.4	3.4	2.2	9.5	2.8	.0
E	.1	.8	1.3	1.3	1.0	.0	59	4.4	22.7	3.9	.0	2.9	9.5	4.3	4.0
ESE	.1	.7	.7	.6	.1	.0	30	2.2	16.9	1.8	3.4	1.9	4.8	2.8	2.2
SE	.2	.6	1.1	.8	.1	.0	38	2.8	16.9	1.8	3.4	4.2	9.5	2.4	8.0
SSE	.0	.8	1.5	.7	.1	.0	43	3.2	17.7	3.9	13.8	2.6	.0	1.2	.0
S	.0	1.4	2.3	1.6	.1	.1	75	5.6	18.7	6.9	6.9	5.1	.0	5.5	12.0
SSW	.1	1.0	1.7	1.5	.3	.1	63	4.7	19.9	5.1	6.9	2.9	.0	3.9	4.0
SW	.2	1.0	2.5	2.6	1.0	.0	99	7.4	21.2	6.3	20.7	6.4	14.3	7.1	12.0
WSW	.1	1.6	3.3	2.8	.5	.0	111	8.3	19.7	8.5	10.3	8.3	9.5	7.5	8.0
W	.2	3.1	6.5	4.5	1.2	.1	210	15.7	19.2	16.0	.0	16.6	14.3	16.9	12.0
WNW	.0	1.5	3.8	2.5	.7	.0	113	8.5	19.2	8.2	.0	8.3	9.5	7.5	4.0
NW	.1	2.0	4.9	4.0	.7	.2	161	12.0	19.9	13.6	6.9	13.7	4.8	14.2	.0
NNW	.1	.8	4.2	3.0	1.0	.0	122	9.1	21.3	9.7	10.3	9.3	4.8	7.5	4.0
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.2	265	524	392	112	10	16	1.2	19.4	.6	.0	1.3	.0	.8	.0
TOT OBS	34	19.8	39.2	29.3	8.4	.7	1337	100.0		331	29	313	21	254	25
TOT PCT	2.5	19.8	39.2	29.3	8.4	.7	1337	100.0		100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD	00	03	06	09	12	15	18
N	1.0	3.4	3.4	1.9	.5	135	10.1	19.6	10.0	13.8	10.5	.8	10.2	28.0	8.6
NE	.1	2.5	1.1	.8	.1	62	4.6	18.8	3.6	3.4	6.1	4.3	8.3	.0	1.9
E	.4	2.3	1.9	1.6	.4	89	6.7	20.7	5.7	3.4	4.8	4.3	7.1	8.0	8.6
SE	.8	2.3	1.9	1.0	.0	81	6.1	17.3	5.7	17.2	6.7	9.5	3.5	8.0	5.1
S	.8	3.9	3.4	1.9	.2	138	10.3	19.2	12.1	13.8	8.0	.0	9.4	16.0	10.9
SW	1.0	5.2	5.6	3.6	.3	210	15.7	20.4	14.8	31.0	14.7	23.8	14.6	20.0	14.7
W	1.6	8.8	9.3	4.1	.3	323	24.2	19.2	24.2	.0	24.9	23.8	24.4	16.0	27.5
NW	1.6	6.0	9.2	3.7	.7	283	21.2	20.5	23.3	17.2	23.0	9.5	21.7	4.0	20.1
VAR	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.2	459	481	249	34	16	1.2	19.4	.6	.0	1.3	.0	.8	.0	2.6
TOT OBS	114	34.3	36.0	18.6	2.5	1337	100.0		331	29	313	21	254	25	313
TOT PCT	8.5	34.3	36.0	18.6	2.5	1337	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0

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TABLE 4

HOUR	PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)									
	WIND SPEED (KNOTS)					PCT TOTAL				
	1-3	4-10	11-21	22-33	34-47	48+	CALM	MEAN	FREQ	OBS
0000	.8	18.3	41.4	30.0	8.6	.3	.6	19.8	100.0	360
0600	1.8	20.7	41.3	27.5	6.0	1.5	1.2	18.9	100.0	324
1200	1.8	21.1	36.6	31.2	7.9	.7	.7	19.2	100.0	279
1800	1.1	19.5	37.1	28.8	10.7	.5	2.2	19.8	100.0	364
TOT	18	265	524	392	112	10	16	19.4		1337
PCT	1.3	19.8	39.2	29.3	8.4	.7	1.2		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	.6	7	2.8	2.2	61	6.1
NNE	.4	.1	.8	1.5	27	6.4
NE	.0	.0	.6	1.7	22	7.5
ENE	.1	.4	.3	1.7	24	6.8
E	.0	.0	1.1	3.4	44	7.7
ESE	.1	.1	.3	1.8	22	7.2
SE	.2	.0	.4	1.7	22	7.1
SSE	.1	.3	.6	1.5	24	6.8
S	.2	.4	1.5	3.3	52	7.0
SSW	.3	.4	1.1	2.5	42	6.6
SW	.1	1.1	1.5	3.5	60	6.8
WSW	1.0	2.0	2.9	2.2	78	5.5
W	1.5	4.1	8.9	3.1	168	5.4
WNW	1.0	2.3	4.6	1.3	88	5.2
NW	2.3	2.3	5.4	2.7	122	5.2
NNW	1.4	1.5	3.9	2.8	91	5.7
VAR	.0	.0	.0	.0	0	.0
CALM	.4	.1	.5	.1	11	4.8
TOT OBS	94	152	358	354	958	6.0
TOT PCT	9.8	15.9	37.4	37.0	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)																TOTAL OBS
	000	149	150	299	300	599	600	999	1000	1999	2000	3499	4999	5000	6499	7999	
N	.0	.0	.0	.0	.3	1.5	1.5	1.3	.8	.2	.0	.0	.0	.0	.0	.0	61
NNE	.0	.0	.0	.0	.1	.1	.1	1.0	.7	.0	.0	.0	.0	.0	.0	.0	27
NE	.1	.1	.1	.1	.2	.8	.5	.2	.2	.1	.0	.0	.0	.0	.0	.0	22
ENE	.0	.0	.0	.0	.1	.3	.7	.5	.5	.1	.0	.0	.0	.0	.0	.0	24
E	.2	.2	.0	.0	.2	.7	1.7	.8	.4	.1	.0	.0	.0	.0	.0	.0	44
ESE	.1	.1	.0	.0	.1	.4	.8	.4	.2	.0	.0	.0	.0	.0	.0	.0	22
SE	.1	.1	.0	.0	.2	.4	1.1	.2	.3	.0	.0	.0	.0	.0	.0	.0	22
SSE	.1	.1	.0	.0	.0	.6	.9	.3	.9	.0	.0	.0	.0	.0	.0	.0	24
S	.1	.1	.0	.0	.2	.6	1.4	.4	.4	.0	.0	.0	.0	.0	.0	.0	52
SSW	.0	.0	.1	.1	.2	.9	1.4	.4	.4	.0	.0	.0	.0	.0	.0	.0	42
SW	.3	.3	.0	.0	.3	1.6	1.1	1.3	1.3	.0	.0	.0	.0	.0	.0	.0	60
WSW	.0	.0	.0	.0	.0	.9	2.3	1.0	1.0	.0	.0	.0	.0	.0	.0	.0	78
W	.1	.1	.0	.0	.1	1.8	4.3	3.0	3.0	.2	.0	.0	.0	.0	.0	.0	168
WNW	.2	.2	.1	.1	.2	.4	2.5	1.5	1.5	.0	.0	.0	.0	.0	.0	.0	88
NW	.2	.2	.0	.0	.3	1.0	3.5	2.3	2.3	.1	.0	.0	.0	.0	.0	.0	122
NNW	.0	.0	.0	.0	.1	1.3	2.2	1.1	.0	.0	.0	.0	.0	.0	.0	.0	91
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.0	.0	.0	.0	.0	.0	.0	.2	.4	.0	.0	.0	.0	.0	.0	.0	11
TOT OBS	15	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	958
TOT PCT	1.6	.3	.3	.3	2.7	13.5	27.0	16.1	1.3	.2	.0	.0	.0	.0	.0	.0	100.0

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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)				
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2
= OR >6500	.2	.3	.4	.5	.5
= OR >5000	.2	.5	.6	.7	.7
= OR >3500	.7	1.8	2.1	2.2	2.2
= OR >2000	10.2	17.4	18.6	18.7	18.7
= OR >1000	25.1	42.1	44.0	45.4	45.5
= OR >500	30.4	52.0	57.6	58.8	59.0
= OR >300	31.1	54.0	60.2	61.5	61.7
= OR >150	31.2	54.1	60.4	61.8	62.0
= OR > 0	31.4	54.7	61.3	62.1	62.1
TOTAL	303	527	591	608	613

TOTAL NUMBER OF OBS: 964 PCT FREQ NH <5/8: 36.4

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	TOTAL OBS							
	0	1	2	3	4	5	6	7
2.5	4.6	9.6	9.6	9.5	10.0	10.0	14.3	10.0
							28.1	1.4
								1000

OCTOBER

PERIOD: (PRIMARY) 1951-1969  
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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ESE	E	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	2	.2
NO PCP	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	1	.1
TOTAL	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	3	.3
PCP	.0	.0	.0	.0	.0	.0	.2	.1	.0	.0	.0	.0	.0	.1	.0	.0	4	.4
NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.1	.0	.0	.0	.0	.0	2	.2
TOTAL	0	0	0	0	0	0	2	1	1	0	1	0	0	1	0	0	6	.6
PCP	.1	.2	.1	.1	.0	.2	.1	.1	.3	.2	.0	.1	.3	.0	.0	.0	19	1.9
NO PCP	.0	.0	.0	.0	.0	.1	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	5	.5
TOTAL	1	2	1	1	0	3	1	1	3	4	0	1	3	0	0	0	24	2.3
PCP	.4	.1	.5	.3	.4	.3	.8	.2	1.1	.8	.6	.1	.1	.2	.0	.0	63	6.1
NO PCP	.2	.1	.0	.1	.4	.0	.3	.2	.4	.5	.7	.3	.3	.5	.0	.1	42	4.1
TOTAL	6	2	5	4	8	3	11	4	15	13	13	4	4	7	0	1	105	10.2
PCP	.4	.3	.2	.2	.4	.7	.6	.1	1.0	.5	.4	.0	.4	.2	.0	.0	64	6.2
NO PCP	2.0	.7	.5	.7	1.4	.6	1.3	1.1	1.4	2.0	3.5	2.0	3.0	2.3	.0	.1	245	23.9
TOTAL	24	10	7	9	18	13	19	12	24	26	40	21	35	26	0	1	309	30.1
PCP	.2	.1	.2	.1	.3	.2	.3	.1	.2	.0	.5	.0	.2	.1	.0	.0	25	2.4
NO PCP	3.4	1.5	1.4	1.1	2.2	.8	1.8	2.0	2.3	4.1	11.1	5.8	8.2	5.1	.0	1.1	553	54.0
TOTAL	37	16	17	12	26	10	21	21	26	42	119	59	86	53	0	11	578	56.4
TOTAL PCT	68	30	30	26	52	29	55	39	69	85	173	85	130	87	0	13	1025	100.0
	6.5	2.9	2.4	2.5	5.1	2.8	5.4	3.8	6.7	8.3	16.9	8.3	12.7	8.5	.0	1.3	100.0	



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PERIOD: (PRIMARY) 1951-1969  
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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	.0	.0	.0	2	.2
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	1	.1
	TOTAL	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	3	.2
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	1	.1
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	2	.2
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.1	.0	.0	.0	.0	.1	.0	.0	3	.2
	TOTAL	0	0	0	0	0	0	0	0	2	1	1	0	1	0	0	1	0	0	6	.5
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	4-10	.0	.0	.1	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	4	.3
	11-21	.0	.0	.0	.0	.0	.1	.1	.0	.1	.0	.1	.1	.0	.0	.1	.0	.0	.0	6	.5
	22+	.2	.2	.0	.0	.0	.0	.1	.3	.1	.1	.2	.2	.0	.1	.1	.0	.0	.0	18	1.4
	TOTAL	2	2	1	0	0	1	3	4	2	1	3	4	0	1	4	0	0	0	28	2.1
2<5	0-3	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.2	4	.3
	4-10	.0	.0	.1	.0	.1	.0	.1	.1	.2	.0	.0	.3	.2	.1	.1	.0	.0	.0	16	1.2
	11-21	.3	.1	.2	.0	.2	.1	.2	.1	.2	.2	.3	.2	.5	.4	.4	.0	.0	.0	43	3.2
	22+	.3	.2	.2	.2	.4	.2	.1	.1	.6	.2	.8	.5	.5	.0	.2	1.0	.0	.0	69	5.2
	TOTAL	8	3	6	2	10	4	5	3	14	5	15	13	15	6	8	13	0	2	132	10.0
5<10	0-3	.0	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.2	5	.4
	4-10	.6	.2	.2	.2	.2	.2	.1	.3	.2	.2	.3	.8	.6	.3	.4	.3	.0	.0	68	5.1
	11-21	.8	.4	.5	.2	.5	.1	.6	.5	.7	.3	.9	.6	1.6	.8	1.2	1.1	.0	.0	140	10.6
	22+	.8	.2	.2	.4	.9	.5	.5	.4	.9	.9	1.4	1.0	1.5	1.1	1.5	1.1	.0	.0	175	13.2
	TOTAL	30	11	10	10	21	11	17	15	24	19	34	31	49	29	42	33	0	2	388	29.3
10+	0-3	.2	.0	.0	.0	.0	.0	.1	.0	.0	.1	.2	.0	.2	.0	.1	.1	.0	.9	22	1.7
	4-10	1.4	.8	.3	.5	.5	.5	.4	.5	1.0	.6	.8	.6	2.3	1.1	1.4	.5	.0	.0	174	13.1
	11-21	1.4	.5	.5	.6	.6	.5	.2	.9	1.1	1.3	1.2	2.5	4.4	2.6	3.2	3.1	.0	.0	326	24.6
	22+	1.5	.4	.5	.1	1.0	.1	.2	.2	.2	.6	1.2	1.7	3.9	2.0	3.2	2.0	.0	.0	247	18.6
	TOTAL	58	21	18	15	28	14	12	20	31	34	44	63	144	76	104	75	0	12	769	58.0
	TOTAL	98	37	35	27	59	30	37	42	74	60	97	111	209	112	160	122	0	16	1326	100.0
	PCT	7.4	2.8	2.6	2.0	4.4	2.3	2.8	3.2	5.6	4.5	7.3	8.4	15.8	8.4	12.1	9.2	.0	1.2	100.0	

OCTOBER

PERIOD: (PRIMARY) 1951-1969  
(OVER-ALL) 1906-1969

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8), AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	1.8	.0	3.6	11.3	28.5	17.5	1.8	.4	.0	.7	65.7	34.3	274
06009	1.7	.4	2.1	11.6	25.8	15.9	1.3	.0	.0	.9	59.7	40.3	233
12015	1.9	.5	2.8	14.9	22.8	14.4	1.9	.0	.0	.5	59.5	40.5	215
18021	.8	.4	2.0	15.7	28.7	16.9	.8	.4	.0	.0	65.7	34.3	254
TOT	15	3	26	130	260	159	14	2	0	5	614	362	976
PCT	1.5	.3	2.7	13.3	26.6	16.3	1.4	.2	.0	.5	62.9	37.1	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.0	.4	1.5	7.0	23.2	67.9	271
06009	.0	.4	1.7	8.7	33.0	56.1	230
12015	.9	.5	.9	10.8	31.6	55.2	212
18021	.0	.4	2.8	5.6	27.9	63.3	251
TOT	2	4	17	76	276	589	964
PCT	.2	.4	1.8	7.9	28.6	61.1	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET, NH >4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00003	1.5	5.2	20.3	46.5	33.2	271
06009	1.7	4.8	21.3	41.7	37.0	230
12015	1.9	6.1	26.4	35.4	38.2	212
18021	.8	3.6	23.9	43.4	32.7	251
TOT	14	47	220	406	338	964
PCT	1.5	4.9	22.8	42.1	35.1	100.0

## OCTOBER

PERIOD: (PRIMARY) 1951-1969  
(OVER-ALL) 1906-1969AREA 0007 UNIMAK  
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TABLE 13

TEMP F	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP									TOTAL OBS	PCT FREQ
	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100			
55/59	.0	.0	.0	.2	.5	.2	.1	.1	.1	11	1.2
50/54	.0	.0	.0	.1	1.3	2.5	5.3	3.9		125	13.2
45/49	.0	.0	.1	.2	2.6	13.8	17.0	15.8		468	49.5
40/44	.0	.0	.2	.6	3.2	7.3	7.7	8.1		257	27.2
35/39	.0	.0	.0	.4	1.9	2.4	1.8	1.9		80	8.5
30/34	.0	.0	.0	.0	.0	.0	.1	.3		4	.4
TOTAL	0	0	3	16	90	248	303	285		945	100.0
PCT	.0	.0	.3	1.7	9.5	26.2	32.1	30.2			

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP											VAR	CALM
N	NE	E	SE	S	SW	W	NW	VAR				
.0	.0	.0	.0	.0	.4	.6	.1	.0			.0	.0
1.5	.2	.8	1.8	2.5	2.8	2.4	1.1	.0			.0	.1
4.1	2.8	4.0	2.9	5.6	11.7	12.5	5.6	.0			.0	.3
3.0	1.6	2.0	2.0	1.7	2.5	5.6	8.7	.0			.0	.1
1.4	.5	.2	.0	.3	.3	1.5	4.1	.0			.0	.1
.2	.0	.0	.0	.0	.0	.0	.2	.0			.0	.0
96	48	67	63	96	168	214	187	0			0	6
10.2	5.1	7.1	6.7	10.2	17.8	22.6	19.8	.0			.0	.6

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR											TOTAL OBS
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN			
00003	59	57	53	47	38	36	32	46.4			363
06009	57	54	51	46	37	32	32	45.0			333
12015	52	51	49	45	37	35	32	44.2			278
18021	57	54	51	45	37	36	34	45.2			364
TOT	59	55	51	46	37	35	32	45.3			1338

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR											TOTAL OBS
HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN				
00003	.0	1.9	13.5	28.6	31.2	24.8	81				266
06009	.0	2.1	8.9	25.0	29.2	34.7	83				236
12015	.0	1.1	8.2	25.5	35.9	29.3	84				184
18021	.0	2.7	6.9	25.3	33.0	32.2	84				261
TOT	0	19	90	248	304	286	83				947

PERIOD: (PRIMARY) 1951-1969  
(OVER-ALL) 1906-1969

OCTOBER

AREA 0007 UNIMAK  
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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	29	33	37	41	45	49	53	57	TOT	W	WD
	32	36	40	44	48	52	56	60	FOG	FOG	FOG
9/10	.0	.0	.0	.0	.0	.1	.2	.2	5	.0	.5
7/8	.0	.0	.0	.0	.2	.1	.1	.0	4	.0	.4
6	.0	.0	.0	.0	.7	.2	.0	.0	8	.1	.8
5	.0	.0	.0	.1	.4	.0	.5	.0	10	.0	1.1
4	.0	.0	.0	.5	.4	.4	.3	.0	16	.0	1.8
3	.0	.0	.0	.3	.4	1.2	.3	.0	21	.1	2.2
2	.0	.0	.1	.3	1.9	2.9	.2	.0	49	.3	5.0
1	.0	.0	.0	.3	2.6	2.3	.0	.1	49	.0	5.4
0	.0	.0	.0	.5	5.4	2.7	.0	.0	79	.8	7.9
-1	.0	.0	.0	.9	5.2	2.5	.0	.0	78	.0	8.6
-2	.0	.0	.0	3.2	8.0	1.4	.0	.0	115	.0	12.6
-3	.0	.0	.3	3.5	4.9	.7	.0	.0	86	.0	9.4
-4	.0	.0	.7	4.8	5.3	.1	.0	.0	99	.0	10.9
-5	.0	.1	1.1	5.4	3.1	.4	.0	.0	92	.0	10.1
-6	.0	.3	.9	1.9	1.6	.0	.0	.0	43	.0	4.7
-7/-8	.0	.5	2.3	2.3	1.6	.1	.0	.0	63	.0	6.9
-9/-10	.1	.5	3.7	1.8	.3	.0	.0	.0	59	.0	6.5
-11/-13	.2	.7	1.2	.7	.0	.0	.0	.0	25	.0	2.7
-14/-16	.0	.2	.5	.3	.1	.0	.0	.0	11	.0	1.2
TOTAL	3	22	99	245	385	139	16	3	912	12	900
PCT	.3	2.4	10.9	26.9	42.2	15.2	1.8	.3	100.0	1.3	98.7

TABLE 16

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N					NE					48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47		
<1	.0	.2	.0	.0	.0	.0	.5	.0	.0	.0	.0	2
1-2	.0	1.2	1.2	.0	.0	.0	.0	.5	.0	.0	.0	2
3-4	.0	.9	1.9	.7	.0	.0	.7	.5	.2	.0	.0	6
5-6	.0	.2	.5	.0	.0	.0	.0	1.2	.2	.0	.0	6
7	.0	.0	1.2	.7	.0	.0	.0	.7	.5	.2	.0	6
8-9	.0	.0	.7	.5	.0	.0	.0	.0	.5	.2	.0	3
10-11	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
13-16	.0	.0	.0	.0	.2	.0	.0	.0	.2	.0	.0	2
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	0	11	24	8	1	0	5	12	7	3	0	27
PCT	.0	2.6	5.6	1.9	.2	.0	1.2	2.8	1.6	.7	.0	6.3

HGT	E					SE					48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47		
<1	.0	.0	.0	.0	.0	.0	.7	.0	.0	.0	.0	3
1-2	.0	.9	.5	.0	.0	.0	.7	.7	.0	.0	.0	6
3-4	.0	.2	.2	.5	.0	.0	.5	.2	.0	.0	.0	3
5-6	.0	.0	.2	.5	.0	.0	.0	.5	.7	.2	.0	6
7	.0	.0	.7	.9	.2	.0	.0	.2	.9	.2	.0	6
8-9	.0	.0	.0	.5	.2	.0	.0	.0	.0	.0	.0	0
10-11	.0	.0	.0	.2	.0	.0	.0	.2	.2	.0	.0	2
12	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	1
13-16	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	2
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	0	5	7	11	3	0	8	8	10	3	0	29
PCT	.0	1.2	1.6	2.6	.7	.0	1.9	1.9	2.3	.7	.0	6.7



OCTOBER

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1969

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)								TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+			
<1	1.6	4.3	.0	.0	.0	.0			26
1-2	.0	7.6	7.8	.0	.0	.0			67
3-4	.0	5.5	14.0	4.6	.0	.0			105
5-6	.0	2.1	10.8	3.4	.7	.0			74
7	.0	.5	7.1	7.3	.7	.0			68
8-9	.0	.2	3.0	4.1	.5	.0			34
10-11	.0	.0	.9	2.7	.2	.0			17
12	.0	.0	.7	2.7	.5	.0			17
13-16	.0	.0	.2	1.4	1.8	.5			17
17-19	.0	.0	.0	.2	.7	.5			6
20-22	.0	.0	.0	.0	.2	.0			4
23-25	.0	.0	.0	.0	.2	.0			1
26-32	.0	.0	.0	.0	.2	.0			1
33-40	.0	.0	.0	.0	.0	.0			0
41-48	.0	.0	.0	.0	.0	.0			0
49-60	.0	.0	.0	.0	.0	.0			0
61-70	.0	.0	.0	.0	.0	.0			0
71-86	.0	.0	.0	.0	.0	.0			0
87+	.0	.0	.0	.0	.0	.0			0
TOTAL	7	88	194	117	27	4			437
PCT	1.6	20.1	44.4	26.8	6.2	.9			100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+ TOTAL	MEAN HGT
<6	1.1	11.1	16.2	8.3	4.9	1.5	.4	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3
6-7	.0	.8	4.1	6.4	6.0	3.6	2.1	1.5	1.5	.4	.2	.2	.0	.0	.0	.0	.0	.0	.0	7
8-9	.0	1.1	.2	.8	2.1	1.5	2.4	1.5	1.1	.6	.8	.0	.0	.0	.0	.0	.0	.0	.0	9
10-11	.0	.0	.0	.2	1.3	2.1	.6	.2	1.5	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	9
12-13	.0	.0	.0	.6	.2	.0	1.1	.2	.9	.2	.2	.0	.2	.0	.0	.0	.0	.0	.0	11
>13	.0	.0	.0	.0	.2	.0	.0	.4	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	10
INDET	6.6	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	41	70	110	86	78	46	35	21	28	8	6	1	1	0	0	0	0	0	0	5
PCT	7.7	13.2	20.7	16.2	14.7	8.7	6.6	4.0	5.3	1.5	1.1	.2	.2	.0	.0	.0	.0	.0	.0	100.0

NOVEMBER

PERIOD: (PRIMARY) 1955-1969  
(OVER-ALL) 1901-1969

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS	
				FRZN PCPN	SNOW PCPN	UTHER FRZN PCPN					FOG PCPN	SMOKE	DUST	NO SIG WEA		
N	.4	.0	.2	.0	.8	.0	.1	1.5	13	.0	.4	.1	.0	.0	3.9	50
NNE	.1	.0	.0	.0	.2	.0	.0	.4	3	.0	.5	.0	.0	.0	2.0	24
NE	.7	.1	.4	.0	.0	.0	.0	1.2	10	.0	.0	.0	.0	.0	1.8	25
ENE	1.1	.0	.4	.0	.0	.0	.0	1.4	12	.0	.0	.0	.0	.0	1.9	28
E	.4	.0	.4	.0	.1	.0	.0	.8	7	.0	.1	.0	.0	.0	1.4	20
ESE	.6	.0	.2	.0	.0	.0	.0	.8	7	.0	.1	.0	.0	.0	1.4	20
SE	1.3	.0	.2	.0	.0	.0	.0	1.5	13	.0	.2	.0	.0	.0	3.2	42
SSE	1.3	.1	.2	.0	.0	.0	.0	1.6	14	.0	.4	.0	.0	.0	2.1	35
S	1.6	.0	.8	.0	.0	.0	.0	2.5	21	.0	.2	.0	.0	.0	5.3	68
SSW	1.3	.2	.2	.0	.1	.0	.0	1.8	15	.0	.0	.0	.1	.0	4.8	57
SW	.8	.2	.4	.0	.1	.0	.2	1.6	14	.0	.2	.0	.0	.0	5.7	65
WSW	.2	.4	.2	.0	.2	.0	.0	1.1	9	.0	.4	.0	.0	.0	7.0	72
W	.2	.7	.1	.0	.5	.2	.2	2.0	17	.0	.0	.0	.1	.0	12.8	127
WNW	.2	.1	.0	.0	.5	.0	.0	.8	7	.0	.0	.0	.0	.0	8.4	79
NW	.2	.0	.1	.0	.4	.0	.0	.7	6	.0	.0	.0	.0	.0	10.3	94
NNW	.2	.0	.1	.0	.5	.0	.0	.8	7	.0	.0	.0	.0	.0	4.2	43
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.6	5
TOT OBS	91	16	34	0	29	2	5	20.5	175	0	21	1	2	655	854	
TOT PCT	10.7	1.9	4.0	.0	3.4	.2	.6			.0	2.5	.1	.2	76.7	100.0	

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA							TOTAL OBS
				FRZG PCPN	SNOW	OTHER FRZN PCPN					FOG WD PCPN	SMOKE HAZE	DUST BLWG	NO SIG WEA				
00003	8.4	.4	3.6	.0	4.0	.0	.4	16.3	41	.0	3.6	.4	.4	.4	79.3	251		
06009	9.7	3.4	4.4	.0	4.9	.0	1.0	23.3	48	.0	1.9	.0	.5	.5	74.3	206		
12015	12.3	2.0	3.4	.0	3.9	1.0	.5	22.5	46	.0	1.0	.0	.5	.5	76.0	204		
18021	11.9	1.9	4.3	.0	2.4	.0	.5	21.0	44	.0	3.8	.0	.0	.0	75.2	210		
TOT	91	16	34	0	33	2	5	20.6	179	0	23	1	3	665	871			
PCT	10.4	1.8	3.9	.0	3.8	.2	.6			.0	2.6	.1	.3	.3	76.3	100.0		



NOVEMBER

AREA 0007 UNIMAK  
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PERIOD: (PRIMARY) 1955-1969  
(OVER-ALL) 1901-1969

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)						TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+				00	03	06	09	12	15	18	21
N	.1	1.1	1.5	2.6	1.4	.3	73	7.0	25.1	6.9	25.0	5.9	21.4	7.2	6.3	6.8	5.7
NNE	.2	.4	.9	.4	.4	.3	26	2.5	22.7	1.8	.0	1.7	7.1	1.4	6.3	3.4	11.4
NE	.0	.3	1.7	.7	.2	.0	30	2.9	19.5	2.9	8.3	4.6	.0	2.4	.0	1.7	2.9
ENE	.0	.8	1.5	.6	.5	.0	35	3.4	19.7	4.7	.0	2.1	.0	.5	6.3	6.3	.0
E	.1	.5	1.0	.6	.0	.0	22	2.1	17.8	1.8	.0	2.5	.0	2.4	.0	2.5	.0
ESE	.0	.7	.5	.8	.3	.0	23	2.2	20.1	2.2	.0	3.3	.0	2.9	.0	1.3	.0
SE	.0	1.0	1.6	.9	.2	.0	48	4.6	22.2	4.4	.0	5.4	.0	6.2	.0	3.8	2.9
SSE	1	.4	1.0	1.6	.6	.1	39	3.8	23.1	2.5	.0	2.9	.0	4.3	6.3	4.6	11.4
S	.0	1.4	2.9	1.8	1.4	.0	79	7.5	21.9	9.1	8.3	7.1	7.1	6.2	25.0	7.2	2.9
SSW	.0	1.1	2.8	1.6	1.4	.0	71	6.8	21.3	5.1	8.3	10.0	14.3	6.2	6.3	5.5	8.6
SW	.0	1.5	3.4	2.2	.7	.1	82	7.9	19.7	8.0	.0	7.9	7.1	9.6	.0	7.6	5.7
WSW	.2	1.3	3.6	2.7	.4	.0	84	8.1	19.4	7.6	.0	6.7	14.3	8.6	25.0	7.6	14.3
W	.2	1.4	6.3	5.7	1.4	.3	157	15.1	21.7	13.8	33.3	13.8	14.3	14.8	6.3	17.3	20.0
WNW	.0	1.1	3.5	2.8	1.0	.0	86	8.3	21.3	8.7	8.3	8.8	.0	10.0	6.3	7.2	2.9
NW	.1	1.4	4.2	4.3	1.4	.1	120	11.6	22.3	14.9	.0	11.3	.0	10.0	6.3	11.4	8.6
NNW	.0	.9	1.9	1.6	.9	.2	57	5.5	22.8	5.5	8.3	5.4	14.3	6.7	.0	4.6	2.9
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.5	155	397	321	135	14	5	.5	.0	.0	.0	.4	.0	.5	.0	1.3	.0
TOT OBS	15	14.9	38.3	31.0	13.0	1.4	1037	100.0	21.4	275	12	239	14	209	16	237	35
TOT PCT	1.4	14.9	38.3	31.0	13.0	1.4	1037	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)					
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPC	00	03	06	09	12	15	18	21
N	.8	2.6	2.0	2.9	1.3	99	9.5	24.5	8.7	25.0	7.5	28.6	8.5	12.5	10.1	17.1
NE	.5	2.2	2.6	.7	.3	65	6.3	19.6	7.6	8.3	6.7	.0	2.9	6.3	8.0	2.9
E	.6	1.3	1.5	.8	.2	45	4.3	19.0	4.0	.0	5.9	.0	5.3	.0	3.8	.0
SE	.5	2.6	2.3	2.6	.4	87	8.4	22.6	6.9	.0	8.4	.0	10.5	6.3	8.4	14.3
S	.7	4.2	5.5	3.7	.4	150	14.5	21.6	14.2	16.7	17.2	21.4	12.4	31.3	12.7	11.4
SW	.9	6.1	5.9	3.0	.2	166	16.0	19.6	15.6	.0	14.6	21.4	18.2	25.0	15.2	20.0
W	.8	7.3	9.5	4.9	.9	243	23.4	21.6	22.5	41.7	22.6	14.3	24.9	12.5	24.5	22.9
NW	.9	4.8	6.0	4.4	1.0	177	17.1	22.5	20.4	8.3	16.7	14.3	16.7	6.3	16.0	11.4
VAR	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.5	323	367	238	47	1037	.5	.0	.0	.0	.4	.0	.5	.0	1.3	.0
TOT OBS	62	31.1	35.4	23.0	4.5	1037	100.0	21.4	275	12	239	14	209	16	237	35
TOT PCT	6.0	31.1	35.4	23.0	4.5	1037	100.0	21.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOVEMBER

PERIOD: (PRIMARY) 1955-1969  
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AREA 0007 UNIMAK  
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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	1-3	4-10	11-21	WIND SPEED (KNOTS)			CALM	MEAN	PCT	TOTAL
				22-33	34-47	48+				
0000	.3	8.7	40.1	38.0	11.1	1.7	.0	22.6	100.0	287
0600	1.6	17.0	41.5	26.1	12.3	1.2	.4	20.6	100.0	253
1200	.4	16.4	33.8	33.3	14.7	.9	.4	21.7	100.0	225
1800	1.5	18.4	37.1	26.1	14.3	1.5	1.1	20.8	100.0	272
TOT	10	155	397	321	135	14	5	21.4		1037
PCT	1.0	14.9	38.3	31.0	13.0	1.4	.5		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

BY WIND DIRECTION

WIND DIR	BY WIND DIRECTION							TOTAL	MEAN
	0-2	3-4	5-7	8 &	OBSCD	8 &	OBSCD		
N	.9	.7	2.2	1.6	41	5.5	4.9	41	5.5
NNE	.5	.3	.9	.4	16	4.9	6.4	16	4.9
NE	.4	.3	.8	1.5	22	6.4	6.9	22	6.4
ENE	.3	.1	.5	2.2	24	6.9	5.8	24	6.9
E	.1	.3	.5	.7	12	7.3	6.9	12	7.3
ESE	.0	.1	.4	.9	11	7.3	6.9	11	7.3
SE	.0	.4	1.6	1.7	28	6.9	6.5	28	6.9
SSE	.0	.1	.4	2.6	24	7.7	6.5	24	7.7
S	.0	1.7	1.6	3.7	53	6.5	6.7	53	6.5
SSW	.3	.5	2.2	3.0	46	6.7	6.1	46	6.7
SW	.4	1.8	2.8	3.8	67	6.1	5.4	67	6.1
WSW	1.2	2.1	3.3	2.6	70	5.4	5.1	70	5.4
W	2.6	4.0	6.7	3.2	125	5.1	5.3	125	5.1
WNW	1.3	1.7	4.6	1.7	71	5.3	4.9	71	5.3
NW	1.7	1.8	6.2	2.6	94	5.4	4.9	94	5.4
NNW	1.8	.8	2.1	1.8	50	4.9	5.8	50	4.9
VAR	.0	.0	.0	.0	0	5.8	5.3	0	5.8
CALM	.0	.1	.1	.1	3	5.3	5.8	3	5.3
TOT OBS	88	128	281	260	757	5.8	5.8	757	5.8
TOT PCT	11.6	16.9	37.1	34.3	100.0				

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION														TOTAL
	000	150	300	600	999	1000	1999	3499	4999	5000	6500	8000+	NH <5/8	ANY HGT	
N	.0	.5	.5	.8	.8	.8	.8	.8	.8	.8	.8	.8	.8	.8	41
NNE	.1	.0	.0	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	16
NE	.3	.0	.0	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7	22
ENE	.0	.0	.1	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5	24
E	.0	.0	.0	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	12
ESE	.3	.0	.0	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	.4	11
SE	.4	.0	.3	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5	28
SSE	.3	.3	.1	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7	24
S	.4	.0	.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	53
SSW	.1	.0	.7	.9	.9	.9	.9	.9	.9	.9	.9	.9	.9	.9	46
SW	.5	.0	.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	67
WSW	.8	.0	.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	70
W	.3	.1	.1	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	125
WNW	.1	.0	.4	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7	71
NW	.1	.3	.1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	94
NNW	.1	.1	.1	.9	.9	.9	.9	.9	.9	.9	.9	.9	.9	.9	50
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3
CALM	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOT OBS	30	10	22	101	166	112	23	5	1	1	1	1	1	1	757
TOT PCT	4.0	1.3	2.9	13.3	21.9	14.8	3.0	.7	.1	.1	.1	.1	.1	.1	100.0

PERIOD: (PRIMARY) 1955-1969  
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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)									
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0		
= OR >6500	.3	.3	.3	.3	.3	.3	.3	.3		
= OR >5000	.8	.9	.9	.9	.9	.9	.9	.9		
= OR >3500	3.1	3.9	3.9	3.9	3.9	3.9	3.9	3.9		
= OR >2000	11.2	17.6	18.5	18.8	18.8	18.8	18.8	18.8		
= OR >1000	21.3	36.8	39.9	40.3	40.6	40.6	40.6	40.6		
= OR >600	26.2	46.6	52.3	53.0	53.5	53.8	53.8	53.8		
= OR >200	26.6	48.7	55.4	56.1	56.7	56.9	56.9	56.9		
= OR >150	26.8	49.2	56.7	57.4	58.0	58.2	58.2	58.2		
= OR > 0	27.2	50.0	59.1	60.6	61.4	62.1	62.1	62.1		
TOTAL	208	383	453	464	470	476	476	476		

TOTAL NUMBER OF OBS: 766

PCT FREQ NH <5/8: 37.9

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

										TOTAL OBS
0	1	2	3	4	5	6	7	8	8	
4.3	3.1	8.9	9.9	10.5	12.8	11.5	11.2	24.3	3.6	811

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PERIOD: (PRIMARY) 1955-1969  
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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	3	.4
NO PCP	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.2	.0	.0	.0	.0	.0	.1	4	.5
TOTAL	1	0	0	0	0	0	0	1	0	0	2	2	0	0	0	0	0	1	7	.8
1/2<1	.0	.0	.1	.0	.1	.0	.0	.1	.1	.0	.0	.0	.1	.0	.0	.0	.0	.0	5	.6
NO PCP	.1	.0	.0	.0	.0	.0	.2	.4	.2	.1	.0	.0	.1	.0	.0	.0	.0	.0	10	1.2
TOTAL	1	0	1	0	1	0	2	4	3	1	0	0	2	0	0	0	0	0	15	1.8
1<2	.0	.0	.1	.1	.0	.1	.2	.0	.1	.0	.1	.0	.1	.0	.0	.1	.0	.0	9	1.1
NO PCP	.0	.5	.1	.0	.0	.1	.0	.1	.0	.2	.1	.0	.0	.0	.1	.0	.0	.0	11	1.3
TOTAL	0	4	2	1	0	2	2	1	1	2	2	0	1	0	1	1	0	0	20	2.4
2<5	.4	.1	.2	.1	.1	.4	.8	.9	.9	.8	.2	.1	.8	.4	.2	.2	.0	.0	58	6.8
NO PCP	.8	.1	.0	.0	.1	.1	.4	.1	.8	.7	.8	.2	.7	.7	.2	.4	.0	.0	53	6.2
TOTAL	10	2	2	1	2	4	10	9	15	13	9	3	13	9	4	5	0	0	111	13.0
5<10	.8	.2	.6	.9	.4	.2	.4	.6	.8	.8	.4	.8	.7	.4	.5	.1	.0	.0	73	8.6
NO PCP	1.4	.9	1.1	.7	.5	.9	1.6	1.2	1.9	1.4	1.8	1.8	4.0	1.8	3.5	.6	.0	.0	213	25.0
TOTAL	19	10	14	14	7	10	17	15	23	19	18	22	40	18	34	6	0	0	286	33.6
10+	.4	.0	.1	.2	.2	.1	.1	.0	.2	.1	.7	.1	.4	.1	.0	.2	.0	.0	26	3.1
NO PCP	2.0	.9	.6	1.2	.9	.4	1.2	.6	2.6	2.5	3.2	5.2	8.1	6.0	6.3	3.3	.0	.5	386	45.4
TOTAL	20	8	6	12	10	4	11	5	24	22	33	45	72	52	54	30	0	4	412	48.4
TOTAL	51	24	25	28	20	20	42	35	66	57	64	72	128	79	93	42	0	5	851	100.0
PCT	6.0	2.8	2.9	3.3	2.4	2.4	4.9	4.1	7.8	6.7	7.5	8.5	15.0	9.3	10.9	4.9	.0	.6	100.0	

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PERIOD: (PRIMARY) 1955-1969  
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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	1	.1
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	2	.2
	11-21	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	2	.2
	22+	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	2	.2
	TOTAL	1	0	0	0	0	0	0	1	0	0	2	2	0	0	0	0	0	1	7	.7
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	1	.1
	4-10	.0	.0	.0	.0	.0	.0	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	2	.2
	11-21	.1	.0	.0	.0	.0	.0	.0	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	5	.5
	22+	.0	.0	.1	.0	.1	.0	.1	.2	.2	.0	.0	.0	.2	.0	.0	.0	.0	.0	9	.9
	TOTAL	1	0	1	0	1	0	2	4	4	1	0	0	3	0	0	0	0	0	17	1.6
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	4-10	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	3	.3
	11-21	.0	.0	.2	.0	.0	.0	.1	.1	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	6	.6
	22+	.0	.4	.0	.1	.0	.2	.1	.1	.0	.2	.1	.0	.0	.1	.1	.0	.0	.0	14	1.4
	TOTAL	0	4	2	2	0	2	2	2	1	2	2	0	1	1	1	1	0	0	23	2.2
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	1	.1
	4-10	.0	.0	.0	.1	.0	.1	.3	.0	.3	.1	.2	.0	.1	.1	.0	.1	.0	.0	14	1.4
	11-21	.3	.0	.1	.2	.1	.0	.2	.1	.4	.4	.2	.3	.3	.4	.1	.1	.0	.0	32	3.1
	22+	1.0	.2	.1	.0	.2	.4	.6	1.0	.9	1.0	.5	.1	.9	.4	.6	.3	.0	.0	82	8.0
	TOTAL	13	2	2	3	3	5	11	11	16	15	9	4	14	9	7	5	0	0	129	12.5
5<10	0-3	.0	.1	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2	.2
	4-10	.2	.3	.0	.2	.2	.3	.3	.1	.1	.3	.4	.5	.2	.1	.6	.0	.0	.0	38	3.7
	11-21	.6	.4	1.0	.8	.4	.3	.5	.4	.9	.9	.5	1.1	1.1	.9	1.5	.2	.0	.0	109	10.6
	22+	1.9	.3	.5	.6	.1	.4	1.0	.9	1.5	1.1	1.2	1.4	2.9	1.1	2.0	.9	.0	.0	181	17.6
	TOTAL	28	11	15	16	7	10	18	15	25	23	21	24	43	21	42	11	0	0	330	32.0
10+	0-3	.1	.1	.0	.0	.1	.0	.0	.0	.0	.0	.0	.2	.0	.0	.1	.0	.0	.4	10	1.0
	4-10	.9	.1	.3	.4	.3	.3	.3	.3	1.0	.7	1.0	.6	1.0	.9	.8	.7	.0	.0	96	9.3
	11-21	.6	.5	.5	.6	.5	.2	.9	.1	1.4	1.5	2.3	2.8	4.9	2.2	2.7	1.6	.0	.0	239	23.2
	22+	1.4	.2	.2	.4	.2	.1	.3	.2	.7	.8	1.2	1.6	3.4	2.2	3.1	1.6	.0	.0	180	17.5
	TOTAL	30	9	10	14	11	6	15	6	31	30	46	54	96	55	69	39	0	4	525	50.9
	TOTAL	73	26	30	35	22	23	48	39	77	71	80	84	157	86	119	56	0	5	1031	100.0
	PCT	7.1	2.5	2.9	3.4	2.1	2.2	4.7	3.8	7.5	6.9	7.8	8.1	15.2	8.3	11.5	5.4	.0	.5	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET,NH >4/8),AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL ANY HGT	NH <5/8 TOTAL OBS
00003	2.5	.4	3.8	15.2	20.3	17.3	3.0	.8	.4	.0	63.7	36.3 237
06009	5.2	1.7	4.1	11.0	18.0	12.2	3.5	1.2	.0	.0	57.0	43.0 172
12015	7.1	1.6	2.7	13.0	23.9	14.1	3.8	.0	.0	.0	66.3	33.7 184
18021	1.6	1.6	2.7	12.5	23.9	14.1	1.6	.5	.0	.5	59.2	40.8 184
TOT	31	10	26	102	167	114	23	5	1	1	480	297 777
PCT	4.0	1.3	3.3	13.1	21.5	14.7	3.0	.6	.1	.1	61.8	38.2 100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.4	.0	.9	8.2	29.7	60.8	232
06009	1.2	1.8	1.8	12.3	29.2	53.8	171
12015	.5	1.1	2.7	13.1	32.2	50.3	183
18021	1.1	.6	1.7	10.0	31.7	55.0	180
TOT	6	6	13	82	235	424	766
PCT	.8	.8	1.7	10.7	30.7	55.4	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET,NH >4/8),BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND5+	NH <5/8 AND 5+	TOTAL OBS
00003	2.2	6.5	25.0	40.5	34.5	232
06009	5.3	11.7	28.7	29.8	41.5	171
12015	7.1	12.6	32.2	37.2	30.6	183
18021	1.7	6.7	23.3	38.3	38.3	180
TOT	30	70	208	282	276	766
PCT	3.9	9.1	27.2	36.8	36.0	100.0

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TABLE 13

TEMP F	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP								TOTAL OBS	PCT FREQ
	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100		
50/54	.0	.0	.0	.0	.0	.4	.1	.0	4	.6
45/49	.0	.0	.0	.4	.9	4.5	5.1	3.5	99	14.3
40/44	.0	.0	.0	1.4	7.1	12.3	17.1	17.2	381	55.2
35/39	.0	.0	.0	1.4	2.6	5.9	6.4	6.1	155	22.5
30/34	.0	.0	.0	.0	.1	1.0	1.7	3.9	47	6.8
25/29	.0	.0	.0	.0	.0	.0	.1	.4	4	.6
TOTAL	0	0	0	23	74	167	211	215	690	100.0
PCT	.0	.0	.0	3.3	10.7	24.2	30.6	31.2		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP												
NE	E	SE	S	SW	W	NW	VAR	CALM				
.0	.1	.0	.0	.0	.3	.1	.0	.0		.0		
.3	1.6	1.7	3.9	1.9	2.9	1.2	.0	.1		.1		
3.9	2.9	7.1	9.6	12.0	11.4	5.5	.0	.1		.1		
1.6	.9	1.2	1.7	1.7	5.5	7.4	.0	.3		.3		
.3	.0	.0	.1	.1	1.2	2.3	.0	.0		.0		
.3	.0	.0	.0	.0	.1	.1	.0	.0		.0		
42	38	69	106	109	148	115	0	4		4		
6.1	5.5	10.0	15.4	15.8	21.4	16.7	.0	.6		.6		

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR										
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS	
00003	54	49	47	41	32	27	26	40.8	293	
06009	51	48	45	41	32	28	26	40.3	253	
12015	49	48	46	41	32	27	27	40.1	225	
18021	52	50	46	41	32	30	28	40.4	267	
TOT	54	49	46	41	32	28	26	40.4	1038	

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR								TOTAL
HOUR (GMT)	0-29	30-59	60-69	70-79	80-89	90-100	MEAN	OBS
00003	.0	2.5	16.2	22.7	28.8	29.8	82	198
06009	.0	4.0	7.4	24.0	32.6	32.0	83	175
12015	.0	2.0	9.9	25.7	32.2	36.3	83	152
18021	.0	4.7	8.2	24.0	29.8	33.3	83	171
TOT	0	23	74	167	214	218	83	696

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	25	29	33	37	41	45	49	53	TOT	W	WD
	28	32	36	40	44	48	52	56		FOG	FOG
7/8	.0	.0	.0	.0	.8	.1	.0	.0	7	.0	.9
6	.0	.0	.0	.0	.8	.3	.1	.0	9	.0	1.1
5	.0	.0	.0	.4	.6	.1	.0	.0	9	.0	1.1
4	.0	.0	.0	.3	.5	.8	.3	.0	14	.0	1.8
3	.0	.0	.0	.4	.1	.3	.0	.0	6	.1	.6
2	.0	.0	.0	.8	1.4	2.1	.0	.1	35	.4	4.0
1	.0	.0	.4	.3	2.0	1.5	.0	.0	33	.1	4.0
0	.0	.0	.3	1.3	6.6	2.1	.3	.0	84	.1	10.4
-1	.0	.0	.3	1.1	4.8	1.3	.0	.0	59	.5	6.9
-2	.0	.0	.0	2.1	7.1	.9	.1	.0	82	.1	10.2
-3	.0	.0	.1	4.0	6.6	.6	.0	.0	91	.3	11.2
-4	.0	.1	.5	3.5	5.1	1.6	.0	.0	87	.3	10.7
-5	.0	.1	1.9	5.8	2.3	.8	.0	.0	86	.1	10.7
-6	.0	.4	1.1	2.3	1.3	.1	.0	.0	41	.3	4.9
-7/-8	.1	.5	2.8	3.4	1.4	.3	.0	.0	67	.6	7.8
-9/-10	.0	1.3	2.4	1.1	.3	.0	.0	.0	40	.0	5.0
-11/-13	.1	1.4	1.5	1.1	.0	.0	.0	.0	33	.0	4.1
-14/-16	.4	.0	.3	.1	.0	.0	.0	.0	6	.0	.8
-17/-19	.3	.6	.3	.0	.0	.0	.0	.0	9	.0	1.1
TOTAL	7	35	93	222	332	102	6	1	798	23	775
PCT	.9	4.4	11.7	27.8	41.6	12.8	.8	.1	100.0	2.9	97.1



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TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N					NE					TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47	
<1	.0	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.8	1.6	.0	.0	.0	.8	.8	.0	.0	.0
3-4	.0	.3	1.6	.3	.0	.0	.0	.5	.3	.0	.0
5-6	.3	.8	.5	.3	.0	.0	.3	.3	.0	.0	.0
7	.0	.0	.3	.0	.5	.0	.0	.3	.3	.3	.0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.3	.0	1.1	.0	.0	.3	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOTAL	1	10	16	3	6	0	4	8	2	1	15
PCT	.3	2.7	4.4	.8	1.6	.0	1.1	2.2	.5	.3	4.1

HGT	E					SE					TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47	
<1	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0
3-4	.0	.5	.5	.0	.0	.0	.3	.5	.8	.0	.0
5-6	.0	.3	.3	.0	.0	.0	.3	.5	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0	.3	.5	.0	.0
8-9	.0	.0	.3	.0	.3	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.3	1.1	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.3	.3	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOTAL	0	5	4	0	1	0	3	5	9	5	22
PCT	.0	1.4	1.1	.0	.3	.0	.8	1.4	2.5	1.4	6.0

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.0	.5	.0	.0	.0	.0	2	.0	.3	.0	.0	.0	.0	1
1-2	.0	1.1	1.1	.0	.0	.0	8	.0	.3	1.6	.0	.0	.0	7
3-4	.0	.3	1.6	.0	.0	.0	7	.0	.8	3.0	.3	.0	.0	15
5-6	.0	.3	1.6	.8	.3	.0	11	.0	.5	1.4	1.1	.3	.0	12
7	.0	.3	.8	.5	.3	.0	7	.0	.3	1.1	1.1	.3	.0	6
8-9	.0	.0	1.1	1.9	1.1	.0	15	.0	.0	.3	1.1	.0	.0	5
10-11	.0	.0	.0	.0	.0	.0	4	.0	.0	.0	.0	.0	.0	3
12	.0	.0	.0	.8	.3	.0	4	.0	.0	.0	.3	.3	.0	2
13-16	.0	.0	.0	1.1	.3	.0	5	.0	.0	.0	.8	.3	.0	4
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.3	1
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	0	9	23	19	8	0	59	0	8	23	20	4	1	56
PCT	.0	2.5	6.3	5.2	2.2	.0	16.2	.0	2.2	6.3	5.5	1.1	.3	15.4

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	GRAND TOTAL
<1	.3	.5	.0	.0	.0	.0	3	.3	1.1	.0	.0	.0	.0	5	16
1-2	.0	1.4	2.2	1.1	.0	.0	13	.0	.5	1.9	.0	.0	.0	9	53
3-4	.0	.3	3.3	.3	.0	.0	7	.0	.3	1.1	1.4	.0	.0	10	70
5-6	.0	.5	1.1	.3	.0	.0	7	.0	.3	1.1	1.4	.5	.0	12	56
7	.0	.3	3.6	1.6	.3	.0	21	.0	.0	1.9	1.6	.0	.0	13	56
8-9	.0	.0	.8	1.9	.3	.0	11	.0	.0	.3	1.1	.0	.3	6	39
10-11	.0	.0	.0	.5	.5	.0	4	.0	.0	.0	.3	.3	.0	2	15
12	.0	.0	.0	1.6	.0	.0	6	.0	.0	.0	1.1	.5	.0	6	20
13-16	.0	.0	.0	1.6	.8	.0	9	.0	.0	.0	.8	.8	.0	7	34
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	4
20-22	.0	.0	.0	.3	.5	.3	4	.0	.0	.0	.0	.0	.0	0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	1
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
TOTAL	1	11	40	33	9	1	95	1	8	23	28	8	2	70	364
PCT	.3	3.0	11.0	9.1	2.5	.3	26.1	.3	2.2	6.3	7.7	2.2	.5	19.2	100.0

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TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	1.1	3.8	.0	.0	.0	.0					18
1-2	.0	5.2	9.3	.0	.0	.0					53
3-4	.0	2.7	12.3	4.1	.0	.0					70
5-6	.5	3.3	6.8	3.8	1.1	.0					57
7	.0	.8	7.1	5.7	1.6	.0					56
8-9	.0	.0	2.7	6.0	1.6	.3					39
10-11	.0	.0	.0	2.2	1.9	.0					15
12	.0	.0	.0	4.4	1.1	.0					20
13-16	.0	.0	.5	4.6	3.5	.5					34
17-19	.0	.0	.0	.0	.0	.0					0
20-22	.0	.0	.0	.3	.5	.3					4
23-25	.0	.0	.0	.0	.0	.0					0
26-32	.0	.0	.0	.0	.0	.3					1
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	6	58	142	114	42	5					367
PCT	1.6	15.8	38.7	31.1	11.4	1.4					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.7	4.7	9.5	1.7	1.9	1.1	.2	.4	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	102	3
6-7	.0	.4	4.7	7.5	4.7	3.0	2.2	2.5	1.1	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	124	6
8-9	.0	.9	1.3	2.2	5.0	3.0	1.3	1.3	3.7	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	88	8
10-11	.0	.0	.9	.9	1.9	3.2	2.2	.4	1.5	.4	.4	.2	.0	.0	.0	.0	.0	.0	.0	56	9
12-13	.0	.0	.4	.2	.2	.0	.4	1.1	1.9	.2	.0	.2	.4	.0	.0	.0	.0	.0	.0	24	13
>13	.0	.0	.0	.2	.0	.2	.2	.2	1.1	.2	.9	.0	.0	.0	.0	.0	.0	.0	.0	14	14
INDET	11.9	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	56	0
TOTAL	63	28	78	60	64	49	30	28	46	5	9	2	2	0	0	0	0	0	0	464	6
PCT	13.6	6.0	16.8	12.9	13.8	10.6	6.5	6.0	9.9	1.1	1.9	.4	.4	.0	.0	.0	.0	.0	.0	100.0	

DECEMBER

PERIOD: (PRIMARY) 1957-1969  
(OVER-ALL) 1908-1969

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
			DRZL	FRZG	PCPN	SNOW	OTHER			PCPN	FOG	SMOKE	DUST	
N	.0	.1	.1	.0	.0	1.0	.0	9	.0	.2	.1	.0	.0	75
NNE	.1	.1	.1	.0	.1	.4	.1	6	.0	.4	.0	.0	.0	44
NE	.2	.1	.1	.0	.1	.1	.0	4	.0	.0	.0	.0	.0	39
ENE	.6	.0	1.2	.0	.0	.2	.0	17	.0	.4	.0	.0	.0	45
E	1.5	.1	1.5	.0	.0	.2	.0	27	.0	.2	.1	.0	.0	52
ESE	.2	.0	.2	.0	.1	.1	.0	5	.0	.0	.0	.0	.0	25
SE	.8	.1	.4	.0	.1	.1	.0	12	.0	.0	.0	.0	.0	30
SSE	.7	.0	.2	.0	.0	.0	.0	8	.0	.0	.0	.0	.0	21
S	.5	.2	.6	.0	.0	.2	.0	12	.0	.5	.0	.0	.0	56
SSW	.2	.1	.8	.0	.0	.2	.0	11	.0	.1	.0	.0	.0	36
SW	.5	.0	.0	.0	.1	.1	.0	4	.0	.2	.0	.0	.0	49
WSW	.1	.0	.0	.0	.0	.2	.0	6	.0	.1	.0	.0	.0	51
W	.2	.1	.0	.0	.0	.5	.0	8	.0	.1	.0	.0	.0	80
WNW	.1	.0	.4	.0	.0	1.5	.0	17	.0	.0	.0	.0	.0	65
NW	.0	.0	.2	.0	.1	1.8	.1	18	.0	.4	.0	.0	.0	83
NNW	.4	.0	.0	.0	.1	1.3	.1	15	.0	.1	.0	.0	.0	78
VAR	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
CALM	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	10
TOT OBS	53	9	52	0	68	0	3	179	0	23	2	0	0	839
TOT PCT	6.3	1.1	6.2	.0	8.1	.5	.4	21.3	.0	2.7	.2	.0	.0	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
			DRZL	FRZG	PCPN	SNOW	OTHER			PCPN	FOG	SMOKE	DUST	
00003	4.1	.8	5.4	.0	.0	8.3	.0	45	.0	5.0	.8	.0	.0	242
06009	8.1	.9	5.0	.0	.5	7.2	.5	46	.0	1.8	.0	.0	.0	222
12015	5.5	1.0	7.0	.0	1.0	8.0	1.0	42	.0	1.5	.0	.0	.0	199
18021	6.9	1.5	6.9	.0	.0	7.8	.0	46	.0	2.0	.0	.0	.0	204
TOT	53	9	52	0	68	0	3	179	0	23	2	0	0	867
PCT	6.1	1.0	6.0	.0	7.8	.5	.3	20.6	.0	2.7	.2	.0	.0	100.0

DECEMBER

PERIOD: (PRIMARY) 1957-1969  
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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)					
	0-3	4-10	11-21	22-33	34-47	48+	TOTAL OBS	PCT FREQ	MEAN SPD		00	03	06	09	12	15
N	.2	1.6	3.4	2.3	1.7	.2	92	9.5	22.1		9.6	5.6	8.1	31.6	7.3	25.0
NNE	.0	1.6	2.3	.8	.5	.0	51	5.2	17.6		6.4	.0	6.0	.0	7.3	8.8
NE	.0	1.1	1.6	1.7	.2	.0	46	4.7	19.2		6.0	11.1	4.3	.0	3.7	2.8
ENE	.0	1.4	1.6	1.7	.5	.1	53	5.5	20.8		3.6	5.6	6.0	10.5	4.2	6.3
E	.0	.8	2.2	2.0	.7	.0	55	5.7	22.2		5.2	5.6	6.0	5.3	4.2	8.0
ESE	.0	.6	1.1	1.0	.0	.2	29	3.0	22.5		3.2	5.6	2.1	5.3	3.1	4.0
SE	.1	1.2	1.5	.7	.2	.0	37	3.8	16.5		3.6	5.6	3.8	.0	4.2	8.0
SSE	.0	.7	.9	.5	.0	.1	22	2.3	18.5		3.2	.0	7.7	5.3	2.1	.0
S	.0	1.2	3.0	1.3	.6	.3	63	6.5	20.5		7.2	.0	7.7	5.3	5.8	6.5
SSW	.0	.7	1.9	.7	.6	.2	40	4.1	22.6		4.0	11.1	4.3	.0	3.7	.0
SW	.2	1.1	2.6	1.6	.7	.0	61	6.3	20.2		6.8	.0	6.8	.0	6.3	6.5
WSW	.0	1.4	3.0	1.0	.4	.2	59	6.1	19.2		7.6	5.6	5.5	10.5	7.9	4.0
W	.1	1.6	3.0	2.6	1.5	.1	87	9.0	21.5		8.4	5.6	8.5	.0	6.3	9.7
WNW	.0	2.6	2.7	1.4	.7	.1	73	7.5	18.6		5.6	5.6	7.7	5.3	11.0	12.5
NW	.1	2.4	3.9	3.0	.8	.5	104	10.7	20.6		10.4	16.7	10.2	15.8	9.9	11.1
NNW	.1	.7	2.8	3.8	1.6	.2	90	9.3	25.4		9.2	16.7	10.2	5.3	6.3	9.2
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0		.0	.0	.0	.0	.0	.0
CALM	1.0	205	364	256	107	22	10	1.0	.0		.4	.0	.9	.0	1.0	.0
TOT OBS	18	21.1	37.4	26.3	11.0	2.3	972	100.0	20.6		251	18	235	19	191	16
TOT PCT	1.9	21.1	37.4	26.3	11.0	2.3	972	100.0	20.6		100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)					
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD			00	03	06	09	12	15
N	1.5	4.9	3.7	4.0	.5	143	14.7	20.5			15.9	5.6	14.0	31.6	14.7	31.3
NE	1.1	4.0	1.6	2.9	.5	99	10.2	20.0			9.6	16.7	10.2	10.5	7.9	12.5
E	.1	2.8	3.5	1.6	.6	84	8.6	22.3			8.4	11.1	8.1	10.5	7.3	.0
SE	.8	2.4	2.0	.7	.2	59	6.1	17.3			6.8	5.6	6.0	5.3	6.3	6.3
S	.5	4.0	3.7	1.5	.8	103	10.6	21.3			11.2	11.1	11.9	5.3	9.4	6.3
SW	.7	4.7	4.3	2.2	.4	120	12.3	19.7			14.3	5.6	12.3	10.5	14.1	6.3
W	1.1	6.3	4.7	3.7	.6	160	16.5	20.2			13.9	11.1	16.2	5.3	23.0	18.8
NW	1.1	5.9	6.3	5.3	1.3	194	20.0	22.8			19.5	33.3	20.4	21.1	16.2	18.8
VAR	.0	.0	.0	.0	.0	0	.0	.0			.0	.0	.0	.0	.0	.0
CALM	1.0	340	290	214	49	10	1.0	.0			.4	.0	.9	.0	1.0	.0
TOT OBS	79	340	290	214	49	972	100.0	20.6			251	18	235	19	191	16
TOT PCT	8.1	35.0	29.8	22.0	5.0	972	100.0	20.6			100.0	100.0	100.0	100.0	100.0	100.0

DECEMBER

PERIOD: (PRIMARY) 1957-1969  
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TABLE 4

HOUR	PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)									
	1-3	4-10	11-21	22-33	34-47	48+	CALM	MEAN	PCT FREQ	TOTAL OBS
0003	1.9	20.4	37.2	28.6	8.6	3.0	.4	20.7	100.0	269
0609	.0	18.9	38.6	26.4	13.0	2.4	.8	21.1	100.0	254
1215	1.0	22.7	40.1	22.2	12.1	1.0	1.0	19.9	100.0	207
1821	.4	22.7	34.3	27.3	10.7	2.5	2.1	20.6	103.0	242
TOT	8	205	364	256	107	22	10	20.6		972
PCT	.8	21.1	37.4	26.3	11.0	2.3	1.0		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION								MEAN CLOUD COVER
	0-2	3-4	5-7	8-10	11-14	15-18	19-22	23-26	
N	2.0	1.1	2.9	2.7	6.4	5.2			
NNE	1.4	.7	1.9	2.0	4.4	5.4			
NE	1.1	.5	1.0	2.6	3.8	5.7			
ENE	.1	.0	.8	3.6	3.3	7.5			
E	.1	.0	.7	4.8	4.1	7.7			
ESE	.3	.0	.8	2.2	2.4	7.0			
SE	.1	.1	1.0	2.7	2.9	7.2			
SSE	.1	.0	.1	1.6	1.4	7.5			
S	.4	.7	1.8	3.1	4.2	6.5			
SSW	.3	.4	1.2	1.6	2.8	6.2			
SW	.4	1.4	1.8	2.3	4.3	6.0			
WSW	.8	1.2	2.3	1.4	4.2	5.3			
W	1.2	.7	3.8	3.7	6.9	5.8			
WNW	.8	1.4	3.1	2.7	5.9	5.3			
NW	1.9	2.2	4.4	2.6	8.1	5.4			
NNW	1.4	1.8	4.6	2.2	7.3	5.4			
VAR	.0	.0	.0	.0	.0	.0			
CALM	.3	.1	.3	.4	.8	5.4			
TOT OBS	94	90	238	310	732	6.0			
TOT PCT	12.8	12.3	32.5	42.3	100.0				

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

WIND DIR	AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION									
	000	150	300	600	1000	2000	3500	5000	8000+	NH <5/8 ANY HGT
N	3	.0	.4	1.0	1.6	1.1	.4	.0	.0	4.0
NNE	.3	.1	.1	1.0	1.1	.7	.1	.1	.0	2.5
NE	.3	.1	.1	.3	1.5	.4	.7	.0	.0	1.8
ENE	1.0	.0	.4	.4	1.8	.4	.4	.0	.0	.1
E	1.1	.3	.4	1.1	1.0	1.2	.1	.0	.1	.3
ESE	.1	.3	.3	.3	1.2	.4	.0	.0	.0	.7
SE	.0	.1	.0	.8	1.9	.5	.0	.0	.0	.5
SSE	.0	.1	.1	.7	.7	.0	.1	.0	.0	.1
S	.7	.0	.5	.8	1.5	.3	.7	.0	.0	1.2
SSW	.4	.1	.0	.5	.7	.7	.1	.0	.0	1.2
SW	.1	.0	.0	.8	1.2	.5	.5	.1	.0	2.5
WSW	.3	.0	.0	.5	1.6	.8	.3	.0	.0	2.0
W	.4	.0	.3	1.8	2.5	1.2	.7	.1	.0	2.5
WNW	.3	.0	.4	1.1	1.4	1.5	.3	.0	.0	2.9
NW	.4	.3	.7	1.1	2.2	1.4	.3	.1	.0	4.6
NNW	.1	.1	.4	1.2	1.8	2.2	.5	.1	.0	3.4
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.1	.0	.1	.3	.0	.1	.0	.0	.4
TOT OBS	42	13	31	99	175	98	40	5	3	732
TOT PCT	5.7	1.8	4.2	13.5	23.9	13.4	5.5	.7	.4	100.0

PERIOD: (PRIMARY) 1957-1969 (OVER-ALL) 1908-1969		DECEMBER		AREA 0007 UNIMAK 53N-COAST 157-165W				
TABLE 7								
CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)								
CEILING (FEET)	= OR >10	= OR >5	= OR >2	VSBY (NM) = OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	.1	.5	.5	.5	.5	.5	.5	.5
= OR >5000	.5	.9	1.2	1.2	1.2	1.2	1.2	1.2
= OR >3500	4.8	5.9	6.2	6.6	6.6	6.6	6.6	6.6
= OR >2000	10.3	17.0	19.0	19.7	19.7	19.7	19.7	19.7
= OR >1000	21.0	36.2	41.4	43.0	43.4	43.6	43.6	43.6
= OR >600	26.7	46.5	53.6	56.0	56.4	56.6	56.6	56.6
= OR >300	27.6	48.8	57.1	60.1	60.5	60.6	60.7	60.7
= OR >150	28.2	49.7	58.3	61.4	62.1	62.2	62.5	62.5
= OR > 0	28.4	50.4	61.0	65.4	66.5	67.6	68.1	68.2
TOTAL	212	376	455	488	496	504	508	509
TOTAL NUMBER OF OBS: 746		PCT FREQ NH <5/A: 31.8						

TABLE 7A									
PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)									
0	1	2	3	4	5	6	7	8	TOTAL
7.3	3.0	7.8	6.1	6.7	8.4	11.3	13.4	30.6	793
								5.3	

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.2	.1	.0	.1	.2	.0	.0	.0	.1	.0	.0	.0	.1	.0	.1	.1	.0	.0	10	1.2
NO PCP	.6	.0	.0	.2	.1	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	9	1.1
TOTAL	7	1	0	3	3	0	0	0	2	0	0	0	1	0	1	1	0	0	19	2.3
PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.1	.0	.0	.1	.1	.0	.0	5	.6
NO PCP	.1	.0	.2	.1	.1	.0	.0	.0	.1	.0	.0	.0	.1	.1	.0	.1	.0	.0	9	1.1
TOTAL	1	0	2	1	1	0	0	0	1	2	0	1	1	1	1	2	0	0	14	1.7
PCP	.2	.0	.1	.4	.2	.2	.2	.0	.4	.5	.1	.2	.0	.4	.2	.1	.0	.0	28	3.3
NO PCP	.2	.1	.0	.4	.1	.1	.0	.0	.1	.2	.0	.2	.2	.0	.4	.0	.0	.0	18	2.1
TOTAL	4	1	1	6	3	3	2	0	4	6	1	4	2	3	5	1	0	0	46	5.5
PCP	.1	.4	.4	1.0	1.7	.1	.4	.4	.5	.4	.1	.0	.1	.1	.4	.0	.0	.0	49	5.8
NO PCP	.6	.4	.2	.5	.5	.2	.4	.5	1.0	.2	.5	.4	.8	.2	.6	.4	.0	.0	61	7.3
TOTAL	6	6	5	12	18	3	6	7	12	5	5	3	8	3	8	3	0	0	110	13.1
PCP	.2	.0	.0	.6	.8	.2	.6	.2	.5	.2	.2	.4	.5	1.4	1.1	1.2	.0	.0	69	8.2
NO PCP	1.5	1.1	1.2	.7	.7	.4	.7	.6	1.4	.6	1.0	1.4	2.9	1.2	2.4	2.0	.0	.1	167	19.9
TOTAL	15	9	10	11	13	5	11	7	16	7	10	15	28	22	29	27	0	1	236	28.1
PCP	.2	.2	.0	.0	.2	.0	.2	.4	.0	.0	.0	.0	.2	.4	.4	.2	.0	.0	21	2.5
NO PCP	4.8	3.0	2.5	1.4	1.4	1.7	1.1	.4	2.5	1.9	3.9	3.3	4.5	4.2	4.4	5.0	.0	1.1	395	47.0
TOTAL	42	27	21	12	14	14	11	6	21	16	33	28	40	38	40	44	0	9	416	49.5
TOTAL PCT	75	44	39	45	52	25	30	20	56	36	49	51	80	67	84	78	0	10	841	100.0
	8.9	5.2	4.6	5.4	6.2	3.0	3.6	2.4	6.7	4.3	5.8	6.1	9.5	8.0	10.0	9.3	.0	1.2	100.0	



DECEMBER

PERIOD: (PRIMARY) 1957-1969  
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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1	.1
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	11-21	.1	.0	.0	.1	.1	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	.1	.0	.0	6	.6
	22+	.5	.1	.0	.2	.2	.0	.0	.0	.1	.0	.0	.0	.1	.0	.0	.0	.0	.0	12	1.2
	TOTAL	7	1	0	3	3	0	0	0	2	0	0	0	1	0	1	1	0	0	19	2.0
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0	2	.2
	11-21	.1	.0	.1	.1	.0	.0	.0	.1	.0	.0	.1	.1	.0	.0	.0	.0	.0	.0	6	.6
	22+	.1	.0	.1	.1	.1	.1	.0	.0	.1	.2	.0	.0	.0	.0	.1	.2	.0	.0	11	1.1
	TOTAL	2	0	2	2	1	1	0	1	1	2	1	1	1	1	1	2	0	0	19	2.0
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	4-10	.0	.1	.0	.3	.1	.1	.0	.0	.0	.0	.0	.1	.2	.0	.0	.0	.0	.0	9	.9
	11-21	.1	.1	.1	.1	.1	.1	.0	.0	.2	.2	.0	.0	.0	.1	.1	.0	.0	.0	12	1.2
	22+	.3	.0	.0	.2	.1	.1	.2	.0	.2	.4	.1	.3	.0	.3	.4	.1	.0	.0	27	2.8
	TOTAL	4	2	1	6	3	3	2	0	4	6	1	4	2	4	5	1	0	0	48	5.0
2<5	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	1	.1
	4-10	.1	.2	.1	.3	.1	.0	.2	.2	.2	.0	.0	.0	.0	.2	.0	.0	.0	.0	18	1.9
	11-21	.6	.1	.0	.4	.9	.2	.4	.3	.6	.3	.3	.3	.3	.1	.3	.0	.0	.0	50	5.2
	22+	.2	.4	.5	.7	.9	.1	.1	.3	.5	.3	.4	.3	.6	.1	.6	.2	.0	.0	62	6.4
	TOTAL	9	7	6	14	19	3	7	7	13	6	9	6	9	4	9	3	0	0	131	13.5
5<10	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.1	2	.2
	4-10	.5	.6	.2	.2	.3	.0	.4	.2	.3	.2	.2	.2	.6	1.2	1.2	.1	.0	.0	64	6.6
	11-21	.2	.6	.3	.3	.2	.2	.4	.3	.5	.4	.7	.8	.9	.4	.8	.5	.0	.0	75	7.7
	22+	1.0	.2	.6	.9	.8	.3	.5	.2	.8	.3	.6	.8	1.7	.6	1.5	2.3	.0	.0	129	13.3
	TOTAL	17	14	11	14	13	5	13	7	16	9	15	18	32	22	35	28	0	1	270	27.9
10+	0-3	.1	.0	.0	.0	.0	.0	.1	.0	.0	.0	.2	.0	.0	.0	.1	.0	.0	.9	14	1.4
	4-10	1.0	.7	.8	.6	.3	.5	.6	.3	.7	.5	.7	1.1	.7	1.0	1.1	.6	.0	.0	112	11.6
	11-21	2.3	1.4	1.1	.6	.8	.6	.7	.2	1.5	.9	1.4	1.8	1.8	2.1	2.6	2.2	.0	.0	214	22.1
	22+	2.0	.6	.7	.2	.5	.5	.1	.1	.5	.3	1.2	.2	1.9	1.2	1.7	2.9	.0	.0	142	14.7
	TOTAL	52	27	26	14	16	16	15	6	27	17	35	30	42	42	53	55	0	9	482	49.7
	TOTAL PCT	91 9.4	51 5.3	46 4.7	53 5.5	55 5.7	28 2.9	37 3.8	21 2.2	63 6.5	40 4.1	61 6.3	59 6.1	87 9.0	73 7.5	104 10.7	90 9.3	0	10 1.0	969 100.0	

DECEMBER

PERIOD: (PRIMARY) 1957-1969  
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8), AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	5.8	3.6	4.9	12.9	22.2	14.2	4.0	1.3	.4	.0	69.3	30.7	225
06009	7.1	.0	4.3	12.0	25.5	9.2	4.9	.5	.0	.0	63.6	36.4	184
12015	5.4	1.2	2.4	12.0	22.2	15.6	6.6	.0	1.2	.6	67.1	32.9	167
18021	4.4	1.7	4.4	15.6	24.4	12.8	6.1	.6	.0	.0	70.0	30.0	180
TOT	43	13	31	99	178	98	40	5	3	1	511	245	756
PCT	5.7	1.7	4.1	13.1	23.5	13.0	5.3	.7	.4	.1	67.6	32.4	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	3.2	2.3	4.1	10.4	26.2	53.8	221
06009	1.6	1.1	4.9	10.9	23.0	58.5	183
12015	2.4	.6	4.9	10.4	29.3	52.4	164
18021	.6	.6	3.9	13.5	29.8	51.7	178
TOT	15	9	23	84	201	404	746
PCT	2.0	1.2	4.4	11.3	26.9	54.2	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET, NH >4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00003	6.3	15.8	33.5	38.0	28.5	221
06009	7.7	13.1	30.6	33.9	35.5	183
12015	5.5	9.8	31.7	38.4	29.9	164
18021	4.5	11.2	36.5	34.3	29.2	178
TOT	45	95	247	270	229	746
PCT	6.0	12.7	33.1	36.2	30.7	100.0

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TABLE 13

TEMP F	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP								TOTAL OBS	PCT FREQ
	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100		
45/49	.0	.1	.0	.0	.0	.4	.3	.1	7	1.0
40/44	.0	.0	.0	.3	1.9	4.5	10.6	12.1	197	29.5
35/39	.0	.0	.0	.7	2.5	6.3	13.3	16.8	265	39.7
30/34	.0	.0	.0	.3	.9	2.2	4.6	8.1	108	16.2
25/29	.0	.0	.0	.1	.6	2.2	1.9	4.2	61	9.1
20/24	.0	.0	.0	.0	.0	1.0	.4	2.4	26	3.9
15/19	.0	.0	.0	.0	.0	.0	.0	.4	3	.4
TOTAL	0	1	0	10	40	112	209	295	667	100.0
PCT	.0	.1	.0	1.5	6.0	16.8	31.3	44.2		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP												
N	NE	E	SE	S	SW	W	NW	VAR	CALM			
.6	.1	.1	.0	.0	.0	.0	.1	.0	.0			
2.7	3.4	3.9	3.7	4.8	5.1	3.4	2.1	.0	.0			
5.4	4.5	4.0	2.1	3.3	4.8	8.8	6.3	.0	.0			
2.7	1.2	1.2	.1	.6	1.9	3.1	5.1	.0	.0			
3.6	.4	.0	.1	.1	.0	.9	3.7	.0	.0			
.3	.0	.0	.0	.0	.0	.3	3.3	.0	.0			
.0	.0	.0	.0	.0	.0	.0	.4	.0	.0			
102	65	62	41	59	79	111	141	0	.0			
15.3	9.7	9.3	6.1	8.8	11.8	16.6	21.1	.0	1.0			

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR										
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS	
00003	49	46	43	38	25	19	16	36.4	278	
06009	45	44	42	37	25	21	18	35.9	254	
12015	45	44	42	37	24	20	19	35.7	214	
18021	45	44	43	37	26	21	19	36.1	241	
TOT	49	45	43	37	25	20	18	36.1	987	

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR									TOTAL OBS
HOUR (GMT)	0-29	30-59	60-69	70-79	80-89	90-100	MEAN		
00003	.0	2.2	5.6	17.8	28.3	46.1	87	180	
06009	.0	1.1	5.9	17.3	33.5	42.2	86	185	
12015	.0	2.2	5.8	20.4	35.0	36.5	85	137	
18021	.0	1.2	6.6	12.0	28.9	51.2	87	166	
TOT	0	11	40	112	209	296	86	668	

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	17	21	25	29	33	37	41	45	49	TOT	W	WO
	20	24	28	32	36	40	44	48	52		FOG	FOG
7/8	.0	.0	.0	.0	.0	.0	.3	.1	.1	4	.0	.5
6	.0	.0	.0	.0	.0	.0	.1	.0	.0	1	.0	.1
5	.0	.0	.0	.0	.0	.0	.1	.1	.0	2	.0	.3
4	.0	.0	.0	.0	.5	.1	1.0	.4	.0	16	.3	1.8
3	.0	.0	.0	.0	.1	.6	1.4	.4	.0	20	.4	2.2
2	.0	.0	.0	.1	.1	1.9	1.9	.1	.0	33	.6	3.6
1	.0	.0	.0	.1	.4	2.1	1.7	.0	.0	33	.0	4.3
0	.0	.0	.0	.3	.1	6.3	3.5	.0	.0	79	.5	9.7
-1	.0	.0	.0	.1	.6	3.7	2.1	.0	.0	51	.1	6.5
-2	.0	.0	.3	.4	1.9	7.8	1.3	.0	.0	90	.1	11.5
-3	.0	.0	.1	.0	.4	4.4	.8	.0	.0	44	.1	5.6
-4	.0	.0	.0	.1	2.6	5.8	.3	.0	.0	68	.4	8.4
-5	.0	.0	.0	.0	1.8	3.6	.3	.0	.0	44	.0	5.7
-6	.0	.1	.0	.3	2.6	2.6	.1	.0	.0	44	.1	5.6
-7/-8	.0	.5	.5	1.9	5.3	1.2	.0	.0	.0	73	.0	9.4
-9/-10	.0	.4	.5	2.1	2.5	.6	.0	.0	.0	47	.0	6.1
-11/-13	.1	.1	4.1	3.7	1.2	.0	.0	.0	.0	72	.0	9.3
-14/-16	.3	.8	2.1	.3	.1	.0	.0	.0	.0	27	.0	3.5
-17/-19	.4	1.6	.6	.0	.0	.0	.0	.0	.0	20	.0	2.6
-20/-22	.5	.1	.1	.0	.0	.0	.0	.0	.0	6	.0	.8
TOTAL	10	28	65	73	157	316	115	9	1	774	21	753
PCT	1.3	3.6	8.4	9.4	20.3	40.8	14.9	1.2	.1	100.0	2.7	97.3

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N					NE					48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47		
<1	.0	.8	.0	.0	.0	.0	.8	.0	.0	.0	.0	3
1-2	.3	1.8	.5	.0	.0	.0	1.3	.3	.0	.0	.0	6
3-4	.0	.5	1.8	.5	.0	.0	.5	2.6	.5	.0	.0	14
5-6	.0	.0	1.5	.0	.5	.0	.3	.8	.3	.0	.0	5
7	.0	.0	.8	1.2	.8	.0	.3	.0	.8	.0	.0	4
8-9	.0	.0	.8	1.3	.0	.0	.0	.0	.0	.0	.0	0
10-11	.0	.0	.0	.0	.5	.0	.0	.0	.0	.3	.0	1
12	.0	.0	.3	.3	.0	.0	.0	.0	.5	.3	.0	3
13-16	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0	.3	1
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	1
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.3	.5	.0	3
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	1	12	22	13	10	0	12	14	10	4	1	41
PCT	.3	3.1	5.6	3.3	2.6	.0	3.1	3.6	2.6	1.0	.3	10.5

HGT	E					SE					48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47		
<1	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
1-2	.0	.8	.3	.0	.0	.0	.8	.5	.0	.0	.0	5
3-4	.0	.5	.8	.5	.0	.0	.3	.5	.0	.0	.0	3
5-6	.0	.5	.5	.5	.0	.0	.0	.3	1.3	.0	.0	6
7	.0	.3	1.5	1.8	.0	.0	.3	.0	.5	.0	.0	3
8-9	.0	.0	.3	.8	.0	.0	.0	.0	.0	.0	.0	0
10-11	.0	.0	.0	1.0	.8	.0	.0	.0	.3	.0	.0	1
12	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	1
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	0	9	13	19	3	0	5	5	8	0	1	19
PCT	.0	2.3	3.3	4.8	.8	.0	1.3	1.3	2.0	.0	.3	4.8

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S					SW					TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47			
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
1-2	.0	1.0	.8	.0	.0	.0	1.8	.3	.0	.0	.0	.0	8
3-4	.0	.5	1.3	.5	.0	.0	1.5	.0	.0	.0	.0	.0	7
5-6	.0	.0	2.3	.0	.0	.0	.0	1.5	.5	.0	.0	.0	8
7	.0	.0	.5	.8	.3	.0	.0	1.8	.3	.0	.0	.0	8
8-9	.0	.0	.3	.0	.0	.0	.0	.5	.5	.5	.0	.0	6
10-11	.0	.0	.0	.5	.3	.0	.0	.0	.5	.3	.0	.0	3
12	.0	.0	.0	.0	.3	.0	.0	.0	.5	.5	.0	.0	5
13-16	.0	.0	.0	.0	1.3	.0	.0	.0	.3	.5	.0	.0	4
17-19	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	2
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	0	6	20	7	8	0	13	18	10	8	51	2	51
PCT	.0	1.5	5.1	1.8	2.0	.0	3.3	4.6	2.6	2.0	.5	.5	13.0

HGT	W					NW					TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47			
<1	.0	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
1-2	.0	.8	.3	.0	.0	.0	1.0	.8	.0	.0	.0	.0	7
3-4	.0	1.0	2.0	.0	.0	.0	.5	2.0	1.3	.0	.0	.0	15
5-6	.0	.5	2.0	.0	.0	.0	.3	2.0	2.0	.3	.0	.0	18
7	.0	.0	.5	1.0	.3	.0	.0	.5	1.3	.8	.0	.0	10
8-9	.0	.3	.0	.8	.5	.0	.0	.3	2.0	.3	.0	.0	10
10-11	.0	.0	.0	.8	.5	.0	.0	.0	.8	.6	.0	.0	6
12	.0	.0	.0	.5	.3	.0	.0	.0	.3	.5	.0	.0	1
13-16	.0	.0	.0	.5	.8	.0	.0	.0	.3	.5	.0	.0	4
17-19	.0	.0	.0	.0	.8	.0	.0	.3	.0	.3	.0	.0	2
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	0	13	19	14	14	0	7	23	32	11	75	2	392
PCT	.0	3.3	4.8	3.6	3.6	.0	1.8	5.9	8.2	2.8	19.1	.5	100.0

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1969

DECEMBER

AREA 0007 UNIMAX  
53N-COAST 157-165W

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	.5	2.5	.0	.0	.0	.0					12
1-2	.3	9.1	3.6	.0	.0	.0					51
3-4	.0	5.3	11.2	3.3	.0	.0					78
5-6	.0	1.5	10.9	4.6	1.0	.0					71
7	.0	.8	5.6	7.6	2.0	.0					63
8-9	.0	.3	2.0	5.3	1.3	.0					35
10-11	.0	.0	.0	3.8	3.3	.0					28
12	.0	.0	.3	2.3	1.5	.3					17
13-16	.0	.0	.0	1.3	3.6	1.5					25
17-19	.0	.0	.5	.3	1.3	.0					8
20-22	.0	.0	.0	.3	.5	.0					3
23-25	.0	.0	.0	.0	.3	.5					3
26-32	.0	.0	.0	.0	.0	.0					0
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	3	77	134	113	58	9					394
PCT	.8	19.5	34.0	26.7	14.7	2.3					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-18	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+ TOTAL	MEAN HGT
<6	.9	7.6	12.2	9.4	5.0	3.0	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	173
6-7	.2	.7	2.3	3.4	6.2	3.4	1.8	2.8	.9	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	98
8-9	.0	1.4	1.6	.9	4.6	2.5	2.5	1.8	3.9	.5	.9	.7	.0	.0	.0	.0	.0	.0	.0	93
10-11	.0	.0	.5	.0	1.1	1.1	.0	.9	1.4	.5	.5	.0	.0	.0	.0	.0	.0	.0	.0	26
12-13	.0	.0	.0	.5	.5	.5	.9	.9	1.1	.2	.0	.5	.0	.0	.0	.0	.0	.0	.0	22
>13	.0	.0	.0	.0	.2	.0	.0	.9	.5	.5	.0	.2	.0	.0	.0	.0	.0	.0	.0	11
INDET	3.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	13
TOTAL	18	42	72	62	78	46	30	32	34	10	6	6	0	0	0	0	0	0	0	14
PCT	4.1	9.6	16.5	14.2	17.9	10.6	6.9	7.3	7.8	2.3	1.4	1.4	0	0	0	0	0	0	0	436
																				100.0

## ANNUAL

PERIOD: (PRIMARY) 1951-1970  
(OVER-ALL) 1901-1970AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 1

## PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	PRECIPITATION TYPE				HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
			DRZL	FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FOG	SMOKE	DUST	SIG	WEA	
N	.2	*	.2	.0	.3		*	.7	103	.0	.3	*	*	4.7		823
NNE	.2	*	.1	.0	.1		.0	.4	54	.0	.2	*	.0	2.2		396
NE	.4	*	.3	*	.1		.0	.8	113	.0	.4	*	.0	2.7		559
ENE	.5	*	.5	.0	.1	.0	.0	1.1	151	.0	.3	.0	*	2.0		483
E	.8	*	.8	.0	.2	*	*	1.8	253	.0	.9	*	*	3.5		880
ESE	.5	*	.4	.0	.1	.0	*	.9	133	.0	.3	*	*	1.9		456
SE	.8	*	.5	.0	*	.0	.0	1.3	188	.0	.8	.1	.0	2.7		689
SSE	.7	*	.5	.0	.1	.0	*	1.3	180	.0	.8	.0	.0	2.0		578
S	.9	.1	.8	.0	.1	.0	.0	1.8	258	.0	1.5	.1	*	4.6		1133
SSW	.4	.1	.5	.0	.1	*	.0	1.0	140	.0	.8	*	*	3.3		730
SW	.7	.1	.6	.0	.1	.0	.0	1.3	180	.0	1.2	.1	.0	5.5		1136
WSW	.4	.1	.4	.0	.1	*	*	.8	119	*	.7	*	*	5.6		1022
W	.4	.1	.4	.0	.2	*	*	1.1	160	*	.8	*	*	10.9		1826
WNW	.2	.1	.2	.0	.3	.0	*	.7	97	.0	.3	*	*	6.9		1121
NW	.3	*	.2	.0	.3	*	*	.8	115	.0	.2	*	*	7.1		1146
NNW	.2	*	.1	.0	.3	*	*	.6	81	.0	.2	*	*	4.8		784
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0		0
CALM	.1	.0	.1	.0	.0	*	.0	.1	19	.0	.3	*	24	2.4		409
TOT OBS	1082	102	889	2	340	15	25	.1	2344	2	1407	88	24	10306		14171
TOT PCT	7.6	.7	6.3	*	2.4	.1	.2	16.5		*	9.9	.6	.2	72.7		100.0

TABLE 2

## PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	PRECIPITATION TYPE				HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
			DRZL	FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FOG	SMOKE	DUST	SIG	WEA	
0003	6.0	.6	4.8	.0	2.7	.1	.2	13.8	529	*	10.4	.8	.2	74.8		3839
0609	7.7	.8	6.0	.0	2.2	.1	.2	16.7	600	.0	10.6	.7	.1	72.0		3603
12015	8.5	.7	7.4	.1	2.6	.1	.2	18.4	623	.0	8.0	.3	.1	73.2		3392
18021	8.2	.9	6.8	.0	2.2	.1	.1	17.3	609	*	10.8	.7	.2	71.0		3529
TOT	1086	106	891	2	347	15	25		2361	2	1435	88	25	10452		14363
PCT	7.6	.7	6.2	*	2.4	.1	.2	16.4		*	10.0	.6	.2	72.8		100.0



## ANNUAL

PERIOD: (PRIMARY) 1951-1970  
(OVER-ALL) 1901-1970AREA 0007 UNIMAK  
53N-COAST 157-165E

TABLE 3

## PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	00	03	06	09	12					15	18	21					
N	.2	1.7	2.3	1.3	.5	.1	1053	6.1	17.8	6.4	7.0	5.7	5.6	5.7	6.3	6.3	7.6					
NNE	.1	1.0	1.1	.5	.1	*	511	3.0	15.6	3.1	3.6	3.0	2.8	3.3	5.7	2.2	2.6					
NE	.2	1.2	1.7	.8	.2	*	704	4.1	15.6	3.6	5.0	4.3	4.9	4.3	3.8	4.0	4.4					
ENE	.1	1.0	1.4	.6	.2	*	585	3.4	16.5	3.3	5.0	3.3	3.5	3.2	3.6	3.5	4.0					
E	.3	1.7	2.2	1.1	.4	*	974	5.6	16.7	5.6	2.4	6.5	6.3	5.4	4.1	5.7	4.4					
ESE	.1	.9	1.4	.6	.1	*	525	3.0	16.2	3.1	2.2	3.2	2.1	3.1	2.7	3.1	2.1					
SE	.2	1.4	2.1	.9	.2	*	836	4.8	15.8	4.9	3.1	4.9	4.2	4.8	4.3	5.2	4.8					
SSE	.1	1.1	1.8	.7	.2	*	676	3.9	16.5	3.7	4.6	3.5	4.4	3.8	4.1	4.4	5.0					
S	.2	2.1	3.4	1.4	.4	.1	1314	7.6	16.7	8.1	4.6	8.0	6.9	7.0	8.1	7.7	7.4					
SSW	.1	1.4	2.3	.9	.3	*	865	5.0	16.7	5.3	3.7	5.0	4.2	4.7	5.7	5.0	6.5					
SW	.3	2.3	3.8	1.4	.4	*	1407	8.2	16.2	8.2	6.7	8.6	9.0	8.2	8.8	7.9	6.8					
WSW	.2	1.9	3.5	1.4	.3	*	1253	7.3	16.5	7.3	9.4	6.7	6.7	7.6	8.4	7.0	8.7					
W	.3	3.8	5.6	2.7	.6	*	2239	13.0	16.6	13.6	14.4	12.6	12.0	13.6	9.7	12.6	12.1					
WNW	.1	2.0	3.9	1.8	.5	*	1424	8.3	17.5	7.9	14.7	7.5	13.0	8.2	8.6	8.3	7.6					
NW	.2	1.8	3.8	2.0	.5	.1	1469	8.5	18.1	8.7	7.5	8.4	8.3	8.7	8.4	9.2	7.6					
N-NW	.2	1.3	2.3	1.3	.5	.1	971	5.6	18.6	5.3	5.5	6.1	5.3	5.2	6.1	5.9	5.8					
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0					
CALM	2.6	4563	7342	3365	917	89	443	2.6	.0	2.1	.7	2.7	.9	3.5	1.6	2.9	1.0					
TOT OBS	973	26.5	42.6	19.5	5.3	.5	17249	100.0	16.4	4144	416	3950	432	3386	442	3860	619					
TOT PCT	5.6	26.5	42.6	19.5	5.3	.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0					

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-6	7-16	17-27	28-40	41+				00	03	06	09	12	15	18	21
N	1.3	3.8	2.4	1.3	.2	1564	9.1	17.0	9.5	10.6	8.7	8.3	9.0	12.0	8.5	10.2
NE	1.2	3.1	2.1	.8	.1	1289	7.5	16.0	6.9	10.1	7.6	8.3	7.4	7.5	7.5	8.4
E	1.4	3.6	2.6	1.0	.2	1499	8.7	16.5	8.7	4.6	9.7	8.3	8.6	6.8	8.8	6.5
SE	1.2	4.1	2.5	1.0	.1	1512	8.8	16.1	8.6	7.9	8.4	8.6	8.5	8.4	9.5	9.9
S	1.4	5.8	4.0	1.3	.2	2179	12.6	16.7	13.3	7.9	13.0	11.1	11.7	13.8	12.7	13.9
SW	1.7	7.2	4.8	1.5	.2	2660	15.4	16.3	15.5	16.1	15.3	15.7	15.7	17.2	14.9	15.5
W	2.1	9.7	6.7	2.5	.3	3663	21.2	17.0	21.5	29.1	20.1	25.0	21.8	18.3	20.9	19.7
NW	1.6	5.4	4.6	2.1	.4	2440	14.1	18.3	13.9	13.0	14.4	13.7	13.9	14.5	14.3	15.0
VAR	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	2.6	7348	5134	1979	283	443	2.6	.0	2.1	.7	2.7	.9	3.5	1.6	2.9	1.0
TOT OBS	2505					17249		16.4	4144	416	3950	432	3386	442	3860	619
TOT PCT	14.5	42.6	29.8	11.5	1.6		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

## ANNUAL

PERIOD: (PRIMARY) 1951-1970  
(OVER-ALL) 1901-1970AREA 0007 UNIMAK  
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TABLE 4

## PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	1-3	4-10	11-21	WIND SPEED (KNOTS)			CALM	MEAN	PCT FREQ	TOTAL OBS
				22-33	34-47	48+				
0000	2.6	25.6	42.5	21.4	5.3	.7	1.5	16.9	100.0	4560
0600	3.0	27.1	43.0	18.5	5.4	.4	2.6	16.3	100.0	4382
1200	3.0	26.4	43.3	18.8	4.9	.4	3.2	16.1	100.0	3828
1800	3.8	26.7	41.5	19.2	5.6	.5	2.7	16.3	100.0	4479
TOT	530	4563	7342	3365	917	89	443	16.4		17249
PCT	3.1	26.5	42.6	19.5	5.3	.5	2.6		100.0	

TABLE 5

## PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION								MEAN CLOUD COVER
	0-2	3-4	5-7	8 &	OBSCD	TOTAL OBS	8 &	OBSCD	
N	1.2	.8	1.9	2.0	750	5.4			
NNE	.6	.2	.9	1.3	379	5.9			
NE	.5	.4	.7	2.3	487	6.4			
ENE	.2	.2	.7	2.3	422	7.1			
E	.3	.2	.8	4.5	728	7.2			
ESE	.1	.1	.5	2.3	376	7.3			
SE	.2	.2	.8	3.2	551	7.3			
SSE	.1	.1	.6	2.8	456	7.5			
S	.3	.4	1.5	5.0	899	7.2			
SSW	.2	.3	1.2	3.1	607	7.0			
SW	.5	.7	2.0	4.2	940	6.6			
WSW	.7	.9	2.2	3.5	920	6.3			
W	1.8	2.0	5.2	4.7	1725	5.8			
WNW	1.5	1.4	3.5	2.4	1107	5.4			
NW	1.7	1.4	3.4	2.4	1131	5.3			
NNW	1.3	.9	2.3	1.7	775	5.2			
VAR	.0	.0	.0	.0	0	.0			
CALM	.8	.4	.7	1.0	362	5.0			
TOT OBS	1484	1332	3541	6158	12615	6.2			
TOT PCT	11.8	10.6	28.9	48.8	100.0				

TABLE 6

## PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH &gt;4/8)

## AND OCCURRENCE OF NH &lt;5/8 BY WIND DIRECTION

WIND DIR	TOTAL OBS												NH <5/8 ANY HGT	TOTAL OBS									
	0-2	3-4	5-7	8-10	TOTAL	CLOUD COVER	000	149	150	299	300	599			600	999	1000	2000	3499	4999	5000	6499	7999
N	1.2	.8	1.9	2.0	750	5.4	.2	.1	.2	.7	1.1	.8	.3	*	1.1	.4	.8	.3	*	*	*	*	*
NNE	.6	.2	.9	1.3	379	5.9	.1	*	.1	.4	.7	.4	.1	*	.5	.4	.4	.1	*	*	*	*	.0
NE	.5	.4	.7	2.3	487	6.4	.4	.1	.2	.5	1.0	.4	.1	*	.5	.4	.4	.1	*	*	*	*	.0
ENE	.2	.2	.7	2.3	422	7.1	1.0	.1	.2	.9	1.3	.8	.2	*	.5	.4	.4	.2	*	*	*	*	*
E	.3	.2	.8	4.5	728	7.2	.4	.2	.4	.9	1.3	.8	.2	*	.5	.4	.4	.2	*	*	*	*	*
ESE	.1	.1	.5	2.3	376	7.3	.4	*	.2	.6	.7	.5	.1	*	.5	.4	.5	.1	.0	*	*	*	*
SE	.2	.2	.8	3.2	551	7.3	.7	.1	.2	.7	1.2	.6	.1	*	.5	.4	.6	.1	*	*	*	*	.1
SSE	.1	.1	.6	2.8	456	7.5	.6	.1	.2	.7	.9	.5	.1	*	.5	.4	.5	.1	*	*	*	*	.1
S	.3	.4	1.5	5.0	899	7.2	1.1	.1	.4	1.2	1.7	1.0	.2	*	.5	.4	.5	.1	*	*	*	*	.1
SSW	.2	.3	1.2	3.1	607	7.0	.5	*	.3	.8	1.3	.6	.2	*	.5	.4	.6	.2	*	*	*	*	.1
SW	.5	.7	2.0	4.2	940	6.6	.7	.1	.3	1.1	1.8	.9	.3	*	.5	.4	.9	.3	.1	*	*	*	.1
WSW	.7	.9	2.2	3.5	920	6.3	.4	.1	.2	.8	2.0	1.0	.3	*	.5	.4	.9	.3	.1	*	*	*	.1
W	1.8	2.0	5.2	4.7	1725	5.8	.5	.1	.3	1.5	3.0	2.0	.5	*	.5	.4	.5	.3	.1	*	*	*	.1
WNW	1.5	1.4	3.5	2.4	1107	5.4	.2	*	.2	.8	1.9	1.5	.3	*	.5	.4	.3	.1	.1	*	*	*	.1
NW	1.7	1.4	3.4	2.4	1131	5.3	.2	.1	.2	.9	2.0	1.3	.3	*	.5	.4	.3	.1	.1	*	*	*	.1
NNW	1.3	.9	2.3	1.7	775	5.2	.2	.1	.1	.7	1.1	.9	.2	*	.5	.4	.3	.1	.1	*	*	*	.1
VAR	.0	.0	.0	.0	0	5.0	.2	.0	.0	.0	.0	.0	.2	*	.5	.4	.3	.1	.1	*	*	*	.0
CALM	.8	.4	.7	1.0	362	5.0	.3	.0	.1	.2	.4	.4	.1	*	.5	.4	.5	.1	.0	*	*	*	.0
TOT OBS	1484	1332	3541	6158	12615	6.2	993	165	510	1648	2905	1748	422	*	71	68	.5	.6	*	*	*	*	*
TOT PCT	11.8	10.6	28.9	48.8	100.0		7.9	1.3	4.0	13.1	23.0	13.9	3.3										.8

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING  
(FEET)

= OR  
>10

= OR  
>5

= OR  
>2

= OR  
>1

= OR  
>1/2

= OR  
>1/4

= OR  
>50YD

= OR  
>0

VSBY (NM)

1.2

1.0

1.1

1.2

1.3

1.3

1.3

1.3

OR >6500

OR >5000

OR >3500

OR >2000

OR >1000

OR >600

OR >300

OR >150

OR > 0

TOTAL

.8

1.2

3.7

11.7

24.4

30.1

31.2

31.4

31.6

4016

1.0

1.5

4.7

17.5

37.5

47.7

50.4

51.1

52.1

6616

1.1

1.7

5.0

18.7

40.8

52.9

56.4

57.4

59.9

7607

1.2

1.8

5.1

19.0

41.6

54.2

58.1

59.3

63.0

7996

1.3

1.8

5.2

19.1

41.8

54.7

58.6

59.9

64.5

8185

1.3

1.9

5.2

19.1

42.1

55.0

59.0

60.3

66.5

8448

1.3

1.9

5.2

19.2

42.2

55.2

59.2

60.5

68.1

8645

1.3

1.9

5.2

19.2

42.2

55.2

59.2

60.5

68.3

8670

TOTAL NUMBER OF OBS: 12695

PCT FREQ NH <5/8: 31.7

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

0

1

2

3

4

5

6

7

8

DBSCD

TOTAL

OBS

6.5

4.2

7.4

6.9

6.4

6.8

11.2

10.5

33.2

7.1

13370

## ANNUAL

PERIOD: (PRIMARY) 1951-1970  
(OVER-ALL) 1901-1970AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	*	*	*	*	.1	*	*	*	.1	.1	.1	*	*	*	*	.1	.0	*	116	.8
NO PCP	.1	*	.1	.1	.4	.1	.3	.3	.7	.3	.5	.3	.4	.1	.1	.1	.0	.2	579	4.1
TOTAL	22	10	24	24	64	19	47	47	107	55	83	55	54	18	13	21	0	32	695	4.9
PCP	*	*	*	*	.1	.1	.1	.1	.1	.1	.1	.1	.1	*	*	*	.0	*	129	.9
NO PCP	*	*	.1	*	.1	*	.1	.1	.3	.1	.2	.1	.1	*	*	.1	.0	.0	207	1.5
TOTAL	5	3	16	12	30	16	27	29	64	30	35	17	24	8	5	14	0	1	336	2.4
PCP	.1	.1	.1	.1	.2	.1	.2	.2	.2	.2	.1	.1	.1	.1	.1	.1	.0	*	300	2.1
NO PCP	*	.1	.1	.1	.2	.1	.2	.2	.3	.2	.2	.1	.2	*	.1	*	.0	*	317	2.2
TOTAL	21	23	32	33	59	30	56	60	71	51	48	30	32	18	28	14	0	11	617	4.4
PCP	.2	.1	.2	.3	.7	.4	.4	.4	.6	.3	.3	.2	.3	.1	.1	.1	.0	*	672	4.8
NO PCP	.2	.1	.2	.2	.5	.3	.3	.4	.7	.4	.6	.4	.5	.3	.2	.2	.0	.1	797	5.6
TOTAL	58	27	67	76	180	91	99	105	174	98	132	81	116	54	46	46	0	19	1469	10.4
PCP	.3	.1	.2	.4	.4	.3	.5	.5	.6	.3	.5	.4	.5	.3	.4	.2	.0	*	850	6.0
NO PCP	1.1	.5	.9	.6	1.3	.8	1.2	.8	1.6	1.2	1.8	1.7	3.0	1.6	1.6	1.1	.0	.5	3001	21.3
TOTAL	204	96	156	144	248	149	233	181	317	206	330	286	488	271	287	187	0	68	3851	27.3
PCP	.1	*	.1	.1	.2	.1	.1	.1	.1	.1	.2	.1	.2	.1	.1	.1	.0	*	278	2.0
NO PCP	3.5	1.6	1.7	1.2	1.9	1.0	1.5	.9	2.6	2.0	3.4	3.8	7.7	5.2	5.3	3.5	.0	1.9	6870	48.7
TOTAL	513	235	260	189	293	148	221	150	391	288	502	549	1111	753	764	506	0	275	7148	50.6
TOTAL	823	394	555	478	874	453	683	572	1124	728	1130	1018	1825	1122	1143	788	0	406	14116	100.0
PCT	5.8	2.8	3.9	3.4	6.2	3.2	4.8	4.1	8.0	5.2	8.0	7.2	12.9	7.9	8.1	5.6	.0	2.9	100.0	

ANNUAL

PERIOD: (PRIMARY) 1951-1970  
(OVER-ALL) 1901-1970

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	*	.0	*	*	*	*	*	*	*	*	*	*	*	.0	*	*	.0	.2	67	.4
	4-10	*	*	*	*	.2	*	.1	.2	.3	.1	.2	.1	.1	*	*	*	.0		211	1.2
	11-21	*	*	.1	.1	.1	.1	.1	.2	.3	.1	.3	.1	.1	*	*	*	.0		314	1.8
	22+	.1	*	*	*	.1	*	.1	.1	*	.1	.1	.1				*	.0		119	.7
	TOTAL	23	11	25	24	65	20	50	48	108	55	85	55	54	18	15	21	0	34	711	4.2
1/2<1	0-3	.0	.0	*	.0	*	.0	*	.0	*	.0	*	*	*	.0	.0	*	.0	*	12	.1
	4-10	*	*	*	*	*	.0	*	*	.1	.1	.1	*	*	*	*	*	.0		88	.5
	11-21	*	*	*	*	.1	.1	.1	.1	.2	.1	.1	*	.1	*	*	*	.0		151	.9
	22+	*	*	*	*	*	*	.1	.1	.1	*	*	*	.1	*	*	*	.0		105	.6
	TOTAL	6	3	16	14	30	18	27	31	66	31	38	17	26	8	8	15	0	2	356	2.1
1<2	0-3	*	*	*	.0	*	*	*	*	*	.0	*	.0	*	.0	*	*	.0	.1	36	.2
	4-10	*	*	*	*	.1	*	*	.1	.1	.1	.1	*	.1	*	*	*	.0		133	.8
	11-21	*	.1	.1	.1	.1	.1	.2	.1	.2	.1	.1	.1	.1	.1	*	*	.0		252	1.5
	22+	.1	.1	.1	.1	.2	.1	.1	.1	.2	.1	.1	.1	*	.1	.1	*	.0	13	241	1.4
	TOTAL	23	25	34	36	63	31	58	62	78	53	51	32	34	22	31	16	0		662	3.9
2<5	0-3	*	.0	*	*	*	.0	*	*	*	*	*	*	*	*	*	*	.0	.1	64	.4
	4-10	.1	*	.1	.1	.2	.1	.1	.1	.2	.1	.1	.1	.2	*	*	.1	.0		304	1.8
	11-21	.2	.1	.2	.2	.5	.3	.3	.3	.4	.3	.4	.3	.3	.2	.1	.1	.0		674	3.9
	22+	.1	.1	.2	.2	.4	.2	.2	.2	.4	.2	.3	.2	.3	.2	.2	.2	.0		609	3.6
	TOTAL	72	31	76	87	193	98	114	111	188	105	152	94	129	67	59	54	0	21	1651	9.6
5<10	0-3	*	*	*	*	*	*	.1	*	.1	*	*	*	*	*	.1	*	.0	.5	185	1.1
	4-10	.3	.1	.2	.2	.4	.3	.4	.2	.5	.3	.6	.5	.8	.4	.4	.2	.0		1002	5.9
	11-21	.5	.3	.5	.4	.6	.4	.4	.6	1.0	.6	1.0	.9	1.4	.8	.9	.5	.0		1909	11.2
	22+	.6	.2	.3	.3	.5	.3	.4	.3	.7	.5	.7	.6	1.2	.6	.8	.5	.0	82	1461	8.5
	TOTAL	254	117	181	171	271	165	268	200	375	246	394	347	578	323	362	223	0		4557	26.6
10+	0-3	.2	.1	.2	.1	.1	.1	.1	*	.1	*	.2	.1	.2	.1	.2	.1	.0	1.7	596	3.5
	4-10	1.2	.8	.8	.6	.8	.4	.7	.5	1.0	.7	1.2	1.2	2.6	1.4	1.3	1.0	.0		2775	16.2
	11-21	1.5	.7	.9	.6	.8	.5	.7	.6	1.3	1.0	1.9	2.1	3.6	2.8	2.7	1.6	.0		3985	23.3
	22+	1.0	.3	.3	.2	.3	.1	.3	.1	.4	.3	.7	.7	1.8	1.4	1.6	1.0	.0		1816	10.6
	TOTAL	670	322	366	248	343	186	307	212	488	366	674	701	1408	979	977	638	0	287	9172	53.6
	TOTAL	1048	509	698	580	965	518	824	664	1303	856	1394	1246	2229	1417	1452	967	0	439	17109	100.0
	PCT	6.1	3.0	4.1	3.4	5.6	3.0	4.8	3.9	7.6	5.0	8.1	7.3	13.0	8.3	8.5	5.7	.0	2.6	100.0	

ANNUAL

PERIOD: (PRIMARY) 1951-1970  
(OVER-ALL) 1901-1970

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH > 4/8), AND  
OCCURRENCE OF NH < 5/8 BY HOUR

HR	000	150	300	600	1000	2000	3500	5000	6500	8000+	TOTAL	NH < 5/8 ANY HGT	TOTAL OBS
(GMT)	149	299	599	999	1999	3499	4999	6499	7999				
00003	6.3	1.4	3.8	12.2	21.6	15.6	3.8	.8	.4	.7	66.7	33.3	3591
06009	8.7	1.3	4.2	12.9	22.1	13.3	3.2	.4	.7	.8	67.5	32.5	3195
12015	9.6	1.1	3.7	12.3	22.3	11.9	3.4	.4	.7	.7	66.3	33.7	2936
18021	7.4	1.3	4.2	13.8	24.8	13.8	2.8	.6	.3	.9	70.0	30.0	3195
TOT	1025	167	516	1653	2928	1777	427	72	69	99	8733	4184	12917
PCT	7.9	1.3	4.0	12.3	22.7	13.8	3.3	.6	.5	.8	67.6	32.4	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HR	< 1/2	1/2 < 1	1 < 2	2 < 5	5 < 10	10+	TOTAL OBS
(GMT)							
00003	3.4	1.2	3.1	7.3	22.4	62.5	3512
06009	4.7	1.8	3.4	7.6	25.6	57.0	3152
12015	4.3	1.7	3.2	9.6	29.1	52.2	2887
18021	4.0	1.8	3.2	9.1	25.1	56.9	3144
TOT	518	204	407	1060	3220	7286	12695
PCT	4.1	1.6	3.2	8.3	25.4	57.4	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET, NH > 4/8), BY HOUR

HR	< 150 (GMT)	< 150 < 50YD	< 600 < 1	< 1000 < 5	1000+ AND 5+	NH < 5/8 AND 5+	TOTAL OBS
(GMT)							
00003	6.2	12.3	29.0	39.4	31.6	3512	
06009	8.8	15.4	32.2	36.6	31.2	3152	
12015	9.5	15.9	33.5	34.9	31.6	2887	
18021	7.5	14.5	33.3	38.6	28.1	3144	
TOT	1003	1834	4045	4760	3890	12695	
PCT	7.9	14.4	31.9	37.5	30.6	100.0	

ANNUAL

PERIOD: (PRIMARY) 1951-1970  
(OVER-ALL) 1901-1970

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 13

TEMP F	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP										TOTAL OBS	PCT FREQ
	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100				
65/69	.0	.0	.0	.0	.0	.1	.2	.0	*	.0	7	.1
60/64	.0	.0	.0	.1	.1	.2	.2	.1	*	.0	87	.7
55/59	.0	.0	.0	.1	.3	1.3	2.7	1.8			778	6.3
50/54	.0	.0	.0	*	.9	2.5	10.8	11.4			3157	25.6
45/49	.0	*	*	*	.8	3.8	6.7	9.7			2599	21.1
40/44	.0	*	.1	.3	1.6	3.6	6.1	8.9			2536	20.6
35/39	.0	*	.4	.4	1.2	2.8	5.4	8.1			2209	17.9
30/34	.0	.0	.0	.1	.5	.9	1.6	2.3			646	5.2
25/29	.0	.0	.0	*	.1	.3	.3	.8			186	1.5
20/24	.0	.0	.0	.0	*	.2	.1	.4			90	.7
15/19	.0	.0	.0	.0	.0	*	*	.1			19	.2
TOTAL	0	5	19	123	671	1932	4196	5368			12314	100.0
PCT	.0	*	.2	1.0	5.4	15.7	34.1	43.6				

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP											VAR	CALM
N	NE	E	SE	S	SW	W	NW	VAR				
.0	*	*	.0	.0	±	*	.0	.0	*		.0	*
.1	*	*	.1	.0	.1	.2	.1	.0	.2		.1	.1
.5	.4	.5	.5	.9	1.2	1.4	.6	.0	1.4		.0	.2
1.8	1.6	1.9	2.2	3.8	4.9	6.3	2.7	.0	2.7		.0	.5
1.6	1.6	1.9	1.6	2.6	3.6	5.0	2.7	.0	2.7		.0	.5
1.5	1.7	2.2	2.6	3.3	3.3	3.3	2.3	.0	2.3		.0	.4
1.6	1.6	1.8	1.7	1.9	2.6	3.5	2.9	.0	2.9		.0	.3
1.1	.6	.3	.1	.1	.3	1.1	1.6	.0	1.6		.0	.1
.5	.1	*	*	*	.0	.2	.6	.0	.6		.0	*
.2	*	*	.0	.0	.0	.1	.4	.0	.4		.0	.0
*	*	.0	.0	.0	*	*	.1	.0	*		.0	.0
1106	945	1068	1089	1556	1982	2611	1713	0	1713		0	244
9.0	7.7	8.7	8.8	12.6	16.1	21.2	13.9	.0	13.9		.0	2.0

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR											TOTAL OBS
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN			
0003	68	61	57	45	32	23	16	45.1	4567		4567
0609	68	58	55	45	32	23	16	44.1	4386		4386
12015	68	56	54	43	32	23	14	43.2	3839		3839
18021	66	58	55	44	31	23	14	43.9	4470		4470
TOT	68	59	55	44	32	23	14	44.1	17262		17262

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR											TOTAL OBS
HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN				
0003	.0	1.7	7.9	19.8	34.1	36.6	85				3269
0609	.0	1.3	5.5	14.8	33.1	45.3	87				3185
12015	.0	.8	3.9	13.6	35.7	46.1	87				2678
18021	.0	.9	4.2	14.1	33.7	47.1	87				3228
TOT	0	147	673	1937	4212	5391	86				12360

PERIOD: (PRIMARY)		1951-1970		ANNUAL																								AREA 0007		UNIMAK	
(OVER-ALL)		1901-1970		TABLE 17																								53N-COAST		157-165W	
		PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)																													
		VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)																													
AIR-SEA	13	17	21	25	29	33	37	41	45	49	53	57	61	65	TOT	W	WD														
THP DIF	16	20	24	28	32	36	40	44	48	52	56	60	64	68		FDG	FOG														
17/19	0	0	0	0	0	0	0	0	0	0	0	0	0	*	1	0	*														
14/16	0	0	0	0	0	0	0	0	0	0	*	*	*	*	8	0	1														
11/13	0	0	0	0	0	0	0	*	*	1	1	*	1	*	56	*	4														
9/10	0	0	0	0	0	0	*	*	1	2	2	2	*	0	109	1	7														
7/8	0	0	0	0	0	0	*	2	4	4	4	2	1	0	218	2	1.5														
6	0	0	0	0	0	0	*	2	3	3	3	1	*	0	169	2	1.1														
5	0	0	0	0	0	0	1	6	7	5	8	3	*	0	399	4	2.7														
4	0	0	0	0	0	*	1	1.0	1.0	1.0	1.2	2	0	0	603	9	3.8														
3	0	0	0	0	0	*	5	1.1	1.9	1.2	1.2	2	0	0	648	9	4.2														
2	0	0	0	0	*	1	1.5	1.7	1.5	2.3	1.6	2	*	0	1138	1.5	7.4														
1	0	0	0	0	0	1	1.9	1.5	1.6	2.1	1.5	1	*	0	1128	1.2	7.6														
0	0	0	0	0	1	5	3.4	2.2	2.4	3.5	1.4	1	*	0	1750	1.6	12.1														
-1	0	0	0	0	*	6	2.6	1.3	1.5	2.0	7	*	0	0	1137	.8	8.1														
-2	0	0	0	*	1	1.1	3.0	1.7	1.8	1.9	5	0	0	0	1285	.7	9.4														
-3	0	0	0	*	1	1.9	1.8	1.3	1.3	1.3	2	0	0	0	877	.4	6.4														
-4	0	0	0	*	2	1.6	1.6	1.1	1.3	.7	1	0	0	0	846	.3	6.3														
-5	0	0	0	*	4	1.3	1.4	.8	.7	.5	1	0	0	0	676	.2	5.0														
-6	0	0	*	*	3	.9	.6	.4	.3	.2	*	0	0	0	362	.2	2.7														
-7/-8	0	0	*	2	8	1.1	.8	.4	.4	2	*	0	0	0	514	.2	3.8														
-9/-10	0	*	*	2	9	.7	.5	.2	.2	2	*	0	0	0	372	*	2.9														
-11/-13	0	*	1	6	6	.3	.2	1	1	1	0	0	0	0	262	*	2.0														
-14/-16	*	1	2	4	1	1	1	*	*	0	0	0	0	0	124	*	1.0														
-17/-19	*	1	2	1	1	*	0	0	0	0	0	0	0	0	170	0	.5														
-20/-22	*	1	1	1	0	0	0	0	0	0	0	0	0	0	28	0	.2														
-23/-25	0	1	*	0	0	0	0	0	0	0	0	0	0	0	9	0	1														
-26/-30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	*														
TOTAL	10	45	86	212	458	1212	2630	2024	2121	2372	1344	230	43	4	12791	1278	11513														
PCT	.1	.4	.7	1.7	3.6	9.5	20.6	15.8	16.6	18.5	10.5	1.8	.3	*	100.0	10.0	90.0														



PERIOD: (PRIMARY) 1963-1970  
 (OVER-ALL) 1963-1970

ANNUAL  
 TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

AREA 0007 UNIMAK  
 53N-COAST 157-165W

HGT	N										NE										TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL									
1	.1	.5	.0	.0	.0	.0	32	.1	.5	.0	.0	.0	.0	30									
1-2	*	1.0	.6	.0	.0	.0	94	.1	.7	.5	.0	.0	.0	70									
3-4	*	.6	1.4	.3	.0	.0	121	*	.5	1.3	.4	.0	.0	123									
5-6	*	.2	1.0	.3	.1	.0	94	*	.2	.7	.3	.1	.0	70									
7	.0	*	.6	.4	.2	.0	67	.0	.1	.2	.4	.1	.0	42									
8-9	.0	*	.3	.4	*	.0	41	.0	*	.2	.3	.1	.0	35									
10-11	.0	*	.1	.1	.1	.0	20	.0	.0	.0	.1	.1	.0	6									
12	.0	.0	*	.1	.1	.0	10	.0	.0	*	.1	*	.0	8									
13-16	.0	.0	*	.1	.1	.0	17	.0	.0	*	.1	.1	.1	11									
17-19	.0	.0	.0	*	*	.0	4	.0	.0	.0	.0	.0	.0	1									
20-22	.0	.0	.0	.0	.0	.0	1	.0	.0	.0	*	*	.0	3									
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0									
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0									
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0									
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0									
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0									
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0									
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0									
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0									
TOTAL	10	134	221	95	39	2	501	13	107	168	97	21	3	399									
PCT	.2	2.5	4.0	1.7	.7	*	9.2	.2	2.0	3.1	1.6	.4	.1	7.3									

HGT	E										SE										TOTAL	48+	TOTAL					
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL														
<1	*	.5	.0	.0	.0	.0	30	.1	.4	.0	.0	.0	.0	.0	27	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	27
1-2	*	1.2	.8	.0	.0	.0	108	*	.9	.7	.0	.0	.0	.0	89	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	89
3-4	.0	.6	1.5	.3	.0	.0	135	*	.5	1.2	.3	.0	.0	.0	112	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	112
5-6	.0	.3	.9	.3	*	.0	80	*	.2	1.0	.5	*	.0	.0	93	.5	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	93
7	.0	.1	.6	.5	.1	.0	72	.0	.1	.4	.3	.1	.0	.0	51	.3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	51
8-9	.0	.1	.2	.4	.1	.0	38	.0	.1	.1	.1	.1	.0	.0	20	.1	.1	.1	.1	.1	.0	.0	.0	.0	.0	.0	.0	20
10-11	.0	.0	.1	.4	.1	.0	33	.0	.0	*	.3	.1	.0	.0	22	.3	.1	.1	.1	.1	.0	.0	.0	.0	.0	.0	.0	22
12	.0	.0	*	.1	*	.0	10	.0	.0	.0	.1	.1	.0	.0	7	.1	.1	.1	.1	.1	.0	.0	.0	.0	.0	.0	.0	7
13-15	.0	.0	*	.1	*	.0	12	.0	.0	.0	.1	.1	.0	.0	14	.1	.1	.1	.1	.1	.0	.0	.0	.0	.0	.0	.0	14
17-19	.0	.0	.0	.0	.0	.0	2	.0	.0	.0	.0	.0	.0	.0	3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3
20-22	.0	.0	.0	.0	.0	.0	1	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	4	143	229	120	22	3	521	8	127	194	90	18	1	438	4	127	194	90	18	1	438	4	127	194	90	18	1	438
PCT	.1	2.6	4.2	2.2	.4	.1	9.5	.1	2.3	3.6	1.6	.3	*	8.0	.1	2.3	3.6	1.6	.3	*	8.0	.1	2.3	3.6	1.6	.3	*	8.0

PERIOD: (PRIMARY) ANNUAL AREA 0007 UNIMAK  
(OVER-ALL) 1963-1970 53N-COAST 157-165W

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.1	.6	.0	.0	.0	.0	35	.1	.8	.0	.0	.0	.0	44
1-2	*	1.2	.7	.0	.0	.0	106	.1	1.4	1.3	.0	.0	.0	149
3-4	.1	1.0	1.8	.3	.0	.0	176	.1	1.2	2.2	.4	.0	.0	213
5-6	.0	.3	1.6	.4	.1	.0	131	.0	.6	2.5	.6	*	.0	200
7	.0	.1	.9	.6	.1	.0	93	.0	.2	1.0	.5	.1	.0	98
8-9	.0	*	.5	.5	.1	*	63	.0	*	.5	.4	.1	.0	52
10-11	.0	.0	.1	.3	.1	.0	28	.0	.0	.3	.4	.1	.0	44
12	.0	.0	.1	.2	.1	.0	23	.0	.0	.1	.3	.1	.0	27
13-16	.0	*	*	.1	.2	.0	23	.0	.0	*	.2	.1	*	25
17-19	.0	.0	*	*	.0	.0	4	.0	.0	*	.1	*	.0	6
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	*	*	.0	2
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	*	.0	2
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	2
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	7	176	322	140	36	1	682	11	225	431	158	34	5	864
PCT	.1	3.2	5.9	2.6	.7	*	12.5	.2	4.1	7.9	2.9	.6	.1	15.8

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	GRAND TOTAL
<1	.3	1.0	.0	.0	.0	.0	69	.1	.7	.0	.0	.0	.0	45	312
1-2	.1	2.5	1.6	.0	.0	.0	232	.1	1.3	1.2	*	.0	.0	141	989
3-4	*	1.7	2.8	.7	.0	.0	288	.0	.7	2.3	.7	.0	.0	201	1369
5-6	.0	.8	2.5	.7	.1	.0	227	*	.3	1.9	.9	.2	.0	178	1073
7	.0	.1	1.2	1.0	.2	.0	137	.0	.1	1.0	.9	.1	*	117	677
8-9	.0	.1	.7	.8	.1	.0	88	.0	.1	.4	.6	.2	*	68	405
10-11	.0	*	.2	.6	.2	.0	53	.0	.0	.1	.5	.1	.0	39	245
12	.0	.0	.1	.4	.1	.0	32	.0	.0	.1	.3	.1	.0	28	145
13-16	.0	.0	*	.4	.4	.1	46	.0	.0	*	.2	.3	*	32	180
17-19	.0	.0	.0	.1	.1	.0	11	.0	.0	*	.0	.1	*	6	37
20-22	.0	.0	.0	*	.1	*	5	.0	.0	.0	*	.1	.0	5	17
23-25	.0	.0	.0	.0	*	.0	2	.0	.0	.0	.0	.0	*	2	6
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	4
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
TOTAL	21	344	497	257	72	4	1192	13	173	373	232	62	9	862	5459
PCT	.4	6.3	9.0	4.7	1.3	.1	21.8	.2	3.2	6.8	4.2	1.1	.2	15.8	100.0

PERIOD: (PRIMARY) 1963-1970  
(OVER-ALL)

ANNUAL

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	4.1	4.7	.0	.0	.0	.0					501
1-2	.5	9.8	7.2	*	.0	.0					994
3-4	.3	6.7	14.0	3.3	.0	.0					1373
5-6	.2	2.8	11.7	3.8	.5	.0					1077
7	.0	.7	5.8	4.6	.9	*					677
8-9	*	.4	2.7	3.4	.6	.1					405
10-11	.0	.1	.8	2.6	.8	.0					245
12	.0	.0	.4	1.5	.6	*					145
13-15	.0	.1	.2	1.3	1.3	.3					180
17-19	.0	.0	.1	.2	.3	*					37
20-22	.0	.0	*	.1	.2	*					17
23-25	.0	.0	.0	.0	.1	*					6
26-32	.0	.0	.0	.0	*	*					4
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	289	1429	2432	1179	304	28					5661
PCT	5.1	25.2	43.0	20.8	5.4	.5					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.5	9.0	14.0	7.9	3.8	2.1	.7	.2	.4	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	2673	4
6-7	*	1.1	4.8	6.7	5.3	2.9	2.1	1.1	.8	.2	.1	*	*	*	*	*	*	*	*	1692	6
8-9	.0	.5	1.4	2.5	3.1	2.0	1.8	1.0	1.8	.4	.2	.1	.0	*	.0	.0	.0	.0	.0	997	8
10-11	.0	*	.3	.9	1.1	1.4	.8	.5	.9	.2	.1	*	*	.0	.0	.0	.0	.0	.0	419	9
12-13	.0	.0	.1	.2	.3	.3	.5	.4	.4	.1	.1	.1	.1	.0	.0	.0	.0	.0	.0	164	11
>13	.0	.0	.0	*	.1	.1	.1	.2	.2	.2	.1	*	*	.0	.0	.0	.0	.0	.0	70	12
INDET	10.2	.1	.2	.1	*	*	*	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	717	0
TOTAL	788	722	1396	1228	927	592	408	233	312	65	33	15	12	1	0	0	0	0	0	6732	5
PCT	11.7	10.7	20.7	18.2	13.8	8.8	6.1	3.5	4.6	1.0	.5	.2	.2	*	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1955-1970  
(OVER-ALL) 1905-1970

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 20

PERCENT FREQUENCY OF OCCURRENCE OF SEA TEMP (DEG F) BY MONTH

SEA TMP DEG F	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	PCT
96+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
95/96	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
93/94	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
91/92	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
89/90	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
87/88	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
85/86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
83/84	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
81/82	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
79/80	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
77/78	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
75/76	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
73/74	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
71/72	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
69/70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
67/68	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
65/66	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
63/64	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
61/62	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
59/60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	5	.0
57/58	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	15	.1
55/56	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	30	.2
53/54	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100	.6
51/52	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	447	2.9
49/50	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1115	7.2
47/48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1525	9.8
45/46	3.1	4.1	2.3	1.5	2.5	8.1	14.4	29.0	15.4	5.2	2.3	.0	1832	11.8
43/44	4.7	5.9	3.0	2.2	11.7	36.2	23.3	25.1	27.1	23.8	4.8	1.2	1394	9.0
41/42	16.7	11.2	10.9	7.2	17.9	20.0	2.3	2.8	5.2	25.1	5.1	1.2	1675	10.8
39/40	40.5	33.8	28.0	30.7	32.6	9.8	.7	.4	.0	2.6	19.0	16.6	1325	8.5
37/38	25.7	31.2	32.8	28.1	9.2	3.9	.6	.0	.0	.9	4.9	31.1	1683	10.8
35/36	7.1	12.0	18.1	11.6	1.7	.2	.5	.0	.0	.7	2.4	26.3	2068	13.3
33/34	1.8	.9	2.7	3.1	.4	.2	.0	.0	.0	.0	3.2	14.8	1548	10.0
31/32	.1	.7	.5	.4	.2	.0	.0	.0	.0	.0	.0	1.9	593	3.8
29/30	.1	.2	.2	.1	.0	.0	.0	.0	.0	.0	.0	.6	107	.7
27/28	.1	.1	.7	.0	.0	.0	.0	.0	.0	.0	.0	1.0	30	.2
<27	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.0	24	.2
TOTAL	1036	887	1141	1123	1494	1242	2295	1605	1622	1217	973	898	15533	100.0
MEAN	39.3	38.9	38.3	39.1	41.7	45.2	49.9	52.1	51.1	47.8	43.7	40.5	45.0	

PERIOD: (PRIMARY) 1955-1970  
(OVER-ALL) 1905-1970

AREA 0007 UNIMAK  
53N-COAST 157-165W

TABLE 21

PRESSURE (MB)												
AVERAGE BY HOUR (GMT)												
MD	0000	0300	0600	0900	1200	1500	1800	2100	MEAN	TOTAL GBS	EXTREMES	
											MAX	YEAR DA HR
JAN	1004	1012	1004	1007	1004	1004	1002	1006	1004	1113	1047	1962 16 00
FEB	1003	1004	1004	1004	1004	1005	1002	1006	1003	948	1038	1960 27 00
MAR	1010	1008	1011	1009	1010	1006	1010	1005	1010	1238	1044	1967 12 12
APR	1011	1009	1011	1006	1012	1007	1010	1009	1011	1244	1040	1965 14 00
MAY	1012	1012	1012	1011	1013	1011	1011	1009	1012	1658	1039	1965 21 00
JUN	1012	1010	1010	1009	1011	1008	1011	1011	1011	1386	1034	1961 27 00
JUL	1016	1017	1016	1018	1017	1018	1017	1018	1017	2453	1036	1961 31 12
AUG	1013	1016	1013	1013	1012	1014	1013	1014	1013	1834	1037	1947 18 18
SEP	1007	1011	1008	1008	1007	1008	1008	1010	1007	1717	1036	1952 02 00
OCT	1004	999	1004	1002	1004	998	1004	1001	1004	1283	1038	1957 02 00
NOV	1005	1008	1004	1003	1003	1007	1004	1003	1004	999	1051	1950 13 12
DEC	1001	997	1000	997	1001	994	999	997	1000	972	1043	1951 26 12
ANN	1009	1011	1009	1010	1009	1010	1009	1010	1009	16845		
OBS	4047	390	3846	432	3340	433	3765	592				

PERCENTILES							
MD	1%	5%	25%	50%	75%	95%	99%
JAN	964	980	992	1005	1014	1030	1038
FEB	970	978	992	1003	1015	1030	1035
MAR	978	984	1000	1011	1021	1032	1039
APR	977	989	1003	1011	1019	1031	1036
MAY	984	993	1005	1012	1020	1028	1035
JUN	985	993	1005	1012	1018	1026	1030
JUL	996	1003	1011	1017	1022	1029	1033
AUG	986	994	1006	1014	1020	1029	1034
SEP	979	987	1000	1008	1016	1024	1032
OCT	973	981	996	1004	1012	1024	1034
NOV	969	976	992	1005	1018	1029	1038
DEC	964	976	990	999	1009	1027	1037

JANUARY

PERIOD: (PRIMARY) 1944-1970  
(OVER-ALL) 1901-1970

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCPN AT		TOTAL	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG	PCPN	SNOW		FRZN	PCPN			FOG	SMOKE	DUST	NO	SIG	
									DB TIME	OBS		MO	HAZE	BLWG	SNOW	WEA	
N	.2		.2	.0	.0	2.8	.0	.1	3.2	57	.0	.1	.0	.0	.0	5.5	158
NNE	.2	.0	.1	.0	.0	.9	.1	.0	1.2	22	.0	.0	.0	.0	.0	2.5	67
NE	.2	.0	.7	.0	.0	1.7	.1	.1	2.7	49	.0	.1	.0	.0	.0	4.1	124
ENE	.1	.1	.2	.0	.0	.4	.0	.0	.7	12	.0	.1	.0	.0	.0	3.0	67
E	1.1	.1	.8	.1	.1	.4	.0	.0	2.4	43	.0	.3	.0	.0	.0	4.2	123
ESE	.8	.1	.5	.0	.0	.5	.0	.0	1.7	30	.0	.3	.0	.0	.0	4.0	108
SE	1.4	.2	.6	.0	.0	.7	.0	.0	2.9	52	.0	.7	.1	.0	.0	5.6	166
SSE	.5	.1	.7	.0	.0	.2	.0	.0	1.3	24	.0	.4	.0	.1	.0	3.8	101
S	.9	.0	.4	.0	.0	.3	.0	.0	1.5	27	.0	.6	.0	.0	.0	5.1	130
SSW	.2	.1	.2	.0	.0	.2	.0	.0	.7	12	.0	.2	.0	.0	.0	2.9	68
SW	.2	.1	.1	.0	.0	.6	.0	.0	.8	15	.0	.1	.0	.0	.0	3.7	84
WSW	.3	.1	.0	.0	.0	.5	.0	.0	.7	12	.0	.1	.0	.0	.0	5.3	109
W	.4	.1	.2	.0	.0	1.6	.0	.0	2.4	43	.0	.1	.0	.0	.0	9.1	208
WNW	.0	.1	.0	.0	.0	.5	.0	.0	.6	10	.0	.2	.0	.1	.0	3.7	82
NW	.1	.0	.0	.0	.0	1.2	.0	.0	1.3	23	.0	.1	.0	.0	.0	4.3	103
NNW	.1	.1	.1	.0	.0	1.1	.0	.1	1.3	24	.0	.2	.0	.0	.0	3.4	90
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
CALM	.1	.0	.0	.0	.0	.0	.0	.0	.1	1	.0	.1	.0	.0	.0	.5	12
TOT OBS	121	15	84	2	245	3	8	3	25.3	456	0	65	2	2	1275	1800	
TOT PCT	6.7	.8	4.7	.1	13.6	.2	.4	.2			.0	3.6	.1	.1	70.8	100.0	

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCPN AT		TOTAL	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG	PCPN	SNOW		FRZN	PCPN			FOG	SMOKE	DUST	NO	SIG	
									DB TIME	OBS		MO	HAZE	BLWG	SNOW	WEA	
00003	5.2	.6	4.8	.0	.0	15.5	.0	.2	25.6	129	.0	4.8	.2	.0	.0	69.4	504
06009	7.6	.9	4.4	.2	.0	14.0	.7	.0	26.4	119	.0	2.2	.2	.2	.2	70.9	450
12015	8.5	.9	3.8	.2	.0	10.3	.7	.0	23.1	103	.0	2.7	.0	.2	.2	74.0	446
18021	5.8	1.0	5.6	.0	.0	14.3	.5	.2	25.8	107	.0	4.6	.0	.0	.0	69.6	414
TOT	122	15	84	2	246	3	8	3	25.2	458	0	65	2	2	1287	1814	
PCT	6.7	.8	4.6	.1	13.6	.2	.4	.2			.0	3.6	.1	.1	70.9	100.0	

JANUARY

PERIOD: (PRIMARY) 1944-1970  
(OVER-ALL) 1901-1970

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-3	4-10	11-21	22-33	34-47	48+	TOTAL OBS	PCT FREQ	MEAN SPD	00	03	06	09	12	15
N	.5	2.1	3.9	2.7	.8	.1	231	10.0	18.8	9.6	11.0	11.4	8.5	9.3	7.6
NNE	.0	1.2	1.4	.9	.1	.0	83	3.6	17.2	3.4	4.9	3.7	2.8	4.3	4.2
NE	.3	1.3	2.3	2.3	.3	.0	152	6.6	19.0	6.8	3.7	5.6	5.7	4.8	5.9
ENE	*	.7	1.7	.8	.1	.0	80	3.5	17.1	4.1	2.4	2.1	5.7	2.3	5.1
E	.1	1.0	3.0	1.8	.7	.0	154	6.7	19.7	6.6	7.3	8.9	3.8	7.5	5.9
ESE	.1	1.2	1.8	2.3	.6	.1	139	6.0	21.3	5.9	8.5	5.6	10.4	7.0	6.8
SE	.3	1.9	3.8	2.0	.8	.1	205	8.9	19.0	9.3	4.9	10.0	4.7	8.3	9.3
SSE	.1	1.5	1.7	1.7	.4	.0	125	5.4	18.8	6.4	12.2	5.2	3.8	5.0	5.1
S	.1	1.7	2.5	1.4	.9	.0	151	6.6	18.9	7.1	1.2	6.9	5.7	6.8	5.1
SSW	.2	.8	1.5	1.2	.4	.0	95	4.1	19.6	4.1	7.3	4.0	6.6	2.8	5.9
SW	.1	1.7	2.0	1.3	.2	*	121	5.3	16.4	6.4	8.5	5.8	4.7	3.8	3.3
WSW	.0	1.5	1.9	1.6	.5	.2	130	5.7	20.1	5.3	7.3	3.7	7.5	7.0	8.5
W	.1	2.3	3.7	3.5	.9	.1	244	10.6	19.8	8.4	8.5	9.8	14.2	12.8	16.1
WNW	*	1.3	1.3	1.3	.6	*	107	4.7	20.1	5.0	2.4	4.6	4.7	5.8	5.1
NW	.1	1.4	2.6	1.2	.4	*	135	5.9	18.5	5.3	3.7	6.2	4.7	6.3	3.4
NNW	*	1.0	1.7	1.6	.5	*	114	5.0	20.7	5.2	6.1	4.2	6.6	5.3	2.5
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.5	525	847	635	194	16	34	1.5	.0	1.2	.0	2.3	.0	1.5	.8
TOT OBS	83	22.8	36.8	27.6	8.4	.7	2300	100.0	18.9	562	82	481	106	400	118
TOT PCT	3.6									100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD	00	03	06	09	12	15	18
N	1.6	5.0	4.5	2.3	.3	314	13.7	18.4	13.0	15.9	15.2	11.3	13.5	11.9	14.7
NE	1.1	3.6	3.5	1.8	.1	232	10.1	18.3	10.9	6.1	7.7	11.3	7.0	11.0	12.9
E	.6	4.2	4.6	3.1	.3	293	12.7	20.5	12.5	15.9	14.6	14.2	14.5	12.7	8.8
SE	1.7	5.0	4.8	2.4	.5	330	14.3	19.0	15.7	17.1	15.2	8.5	13.3	14.4	14.3
S	1.0	3.7	3.7	2.0	.3	246	10.7	19.2	11.2	8.5	10.8	12.3	9.5	11.0	10.7
SW	1.6	3.8	3.6	1.6	.4	251	10.9	18.3	11.7	15.9	9.6	12.3	10.8	11.0	10.1
W	.9	5.8	4.8	3.3	.4	351	15.3	19.9	13.3	11.0	14.3	18.9	18.5	21.2	14.5
NW	.5	4.2	4.0	1.9	.3	249	10.8	19.5	10.5	9.8	10.4	11.3	11.5	5.9	12.3
VAR	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.5	811	768	422	61	34	1.5	.0	1.2	.0	2.3	.0	1.5	.8	1.8
TOT OBS	238	35.3	33.4	18.3	2.7	2300	100.0	18.9	562	82	481	106	400	118	456
TOT PCT	10.3								100.0	100.0	100.0	100.0	100.0	100.0	100.0

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PERIOD: (PRIMARY) 1944-1970  
(OVER-ALL) 1901-1970

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	1-3	4-10	11-21	WIND SPEED (KNOTS)		CALM	PCT		TOTAL OBS
				22-33	34-47		MEAN	FREQ	
00003	2.3	22.5	34.9	28.4	10.2	.5	1.1	19.4	100.0
06009	1.7	21.8	40.7	25.7	7.7	.5	1.9	18.6	100.0
12015	1.5	22.0	36.1	28.8	8.9	1.4	1.4	19.5	100.0
18021	2.9	25.0	35.6	27.6	6.7	.5	1.6	18.0	100.0
TOT	49	525	847	635	194	16	34	18.9	2300
PCT	2.1	22.8	36.8	27.6	8.4	.7	1.5	100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION								TOTAL OBS	MEAN CLOUD COVER
	0-2	3-4	5-7	8-10	11-14	15-18	19-22	23-26		
N	.6	.6	3.8	3.8					126	6.5
NNE	.5	.5	1.3	1.3					51	5.8
NE	.6	.8	2.0	2.1					78	6.1
ENE	.6	.5	1.5	1.4					57	5.8
E	.5	.5	1.3	4.0					90	6.8
ESE	.3	.3	1.3	4.5					91	7.2
SE	.3	.8	1.8	5.4					119	6.9
SSE	1.0	.4	1.3	3.0					83	6.1
S	1.2	.5	2.0	3.8					107	6.1
SSW	.8	.4	1.2	1.5					57	5.4
SW	.7	.8	2.0	1.4					69	5.6
WSW	.8	1.2	2.3	2.0					90	5.5
W	1.7	2.0	4.8	3.8					176	5.7
WNW	.7	1.3	2.1	1.2					75	5.3
NW	.7	1.1	2.5	1.0					76	5.4
NNW	.4	.9	2.2	2.0					80	6.2
VAR	.0	.0	.0	.0					0	.0
CALM	.3	.1	.0	.1					9	3.2
TOT OBS	170	181	477	606					1434	6.1
TOT PCT	11.9	12.6	33.3	42.3					100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

WIND DIR	AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION																TOTAL OBS
	000	149	150	299	300	309	599	600	609	1000	1999	2000	3499	4999	5000	6499	
N	.7	.1	.1	.3	1.5	1.5	2.5	.2	.1	.1	.1	.1	.1	.1	.1	.1	126
NNE	.2	.0	.0	.0	.4	1.0	.8	.1	.1	.1	.1	.1	.1	.1	.1	.1	51
NE	.1	.0	.0	.1	.6	2.0	1.2	.1	.0	.0	.0	.0	.0	.0	.0	.0	78
ENE	.0	.1	.1	.1	.8	.7	.8	.1	.0	.0	.0	.0	.0	.0	.0	.0	57
E	.8	.1	.1	.0	1.3	1.1	1.0	.1	.1	.1	.1	.1	.1	.1	.1	.1	90
ESE	.7	.2	.2	.2	1.7	1.3	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	91
SE	1.0	.2	.2	.3	1.8	2.3	.8	.1	.0	.0	.0	.0	.0	.0	.0	.0	119
SSE	.8	.1	.1	.2	1.0	1.4	.4	.1	.0	.0	.0	.0	.0	.0	.0	.0	83
S	1.0	.0	.0	.4	1.0	1.7	.4	.1	.0	.0	.0	.0	.0	.0	.0	.0	107
SSW	.1	.0	.0	.2	.6	.8	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	57
SW	.2	.0	.0	.1	.5	1.5	.5	.1	.0	.0	.0	.0	.0	.0	.0	.0	69
WSW	.4	.1	.1	.1	1.0	1.7	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	90
W	.6	.1	.1	.4	1.6	3.3	1.0	.1	.1	.1	.1	.1	.1	.1	.1	.1	176
WNW	.3	.1	.1	.1	.8	1.1	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	75
NW	.1	.0	.0	.0	1.2	1.1	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	76
NNW	.5	.0	.0	.1	.7	1.7	.7	.2	.1	.1	.1	.1	.1	.1	.1	.1	80
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.1	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	9
TOT OBS	106	16	16	38	238	349	181	18	11	9	5	463	1434	100.0			
TOT PCT	7.4	1.1	1.1	2.6	16.6	24.3	12.6	1.3	.8	.6	.3	32.3	100.0				



TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	= OR >10	= OR >5	= OR >2	VSBY (NM)			= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	.5	.8	.8	.8	.9	1.0	1.0	1.0	1.0	1.0
= OR >5000	.9	1.5	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7
= OR >3500	1.7	2.6	2.7	2.8	2.9	3.0	3.0	3.0	3.0	3.0
= OR >2000	7.9	13.9	15.2	15.3	15.6	15.7	15.7	15.7	15.7	15.7
= OR >1000	18.5	34.0	37.8	39.1	39.8	39.9	39.9	39.9	39.9	39.9
= OR >600	23.4	44.6	52.1	54.9	56.1	56.4	56.4	56.4	56.4	56.4
= OR >300	24.1	46.1	54.2	57.4	58.7	59.1	59.1	59.1	59.1	59.1
= OR >150	24.3	46.7	54.9	58.1	59.5	60.2	60.2	60.2	60.2	60.2
= OR > 0	24.8	49.7	58.9	63.2	65.5	66.9	66.9	67.7	67.7	67.7
TOTAL	357	717	850	912	945	965	965	976	976	977

TOTAL NUMBER OF OBS: 1442

PCT FREQ NH <5/8: 32.2

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
3.2	3.8	9.5	8.2	7.0	7.0	13.7	10.7	29.9	6.9	1519	

JANUARY

PERIOD: (PRIMARY) 1944-1970  
(OVER-ALL) 1901-1970

AREA 0008 DUTCH HARBR  
51-55N 165-172W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.2	.1	.1	.3	.1	.3	.1	.0	.1	.0	.1	.1	.1	.1	.0	.0	.0	.1	23	1.3
ND PCP	.1	.0	.0	.1	.1	.1	.3	.1	.3	.1	.1	.1	.0	.0	.1	.0	.0	.1	23	1.3
TOTAL	6	1	1	8	3	8	7	1	6	2	3	3	1	1	1	0	0	2	46	2.5
PCP	.2	.0	.3	.3	.3	.3	.1	.1	.1	.1	.1	.0	.3	.1	.1	.2	.0	.0	36	2.0
ND PCP	.2	.0	.1	.2	.1	.3	.1	.1	.1	.1	.0	.1	.1	.0	.0	.1	.0	.0	27	1.5
TOTAL	7	0	6	9	7	8	4	2	3	2	1	1	7	2	1	5	0	0	63	3.5
PCP	.3	.1	.3	.3	.6	.3	.6	.3	.4	.2	.1	.3	.3	.1	.2	.2	.0	.0	76	4.2
ND PCP	.0	.1	.1	.3	.2	.3	.3	.1	.2	.0	.1	.1	.1	.0	.0	.1	.0	.0	27	1.5
TOTAL	6	3	8	11	13	11	15	7	10	3	4	6	7	1	4	5	0	0	103	5.7
PCP	1.2	.3	.6	.3	.6	.3	.9	.3	.3	.2	.3	.1	.4	.2	.4	.4	.0	.1	122	6.7
ND PCP	.4	.3	.3	.7	.6	.4	1.2	.4	.5	.2	.3	.4	.4	.3	.3	.2	.0	.1	118	6.5
TOTAL	28	10	15	19	22	19	38	14	15	6	10	10	15	9	14	11	0	2	240	13.3
PCP	1.1	.7	1.2	.3	.8	.3	1.0	.5	.7	.2	.3	.1	1.1	.1	.4	.4	.0	.0	166	9.2
ND PCP	1.8	1.0	1.3	1.7	1.6	1.3	2.5	1.8	2.3	1.2	1.1	1.3	3.1	1.0	1.0	1.2	.0	.0	465	25.7
TOTAL	53	30	44	36	43	36	64	42	53	25	26	25	77	20	37	28	0	0	631	34.9
PCP	.5	.1	.3	.1	.1	.1	.2	.1	.0	.1	.1	.1	.2	.0	.1	.2	.0	.0	44	2.4
ND PCP	3.0	1.2	2.4	1.3	1.9	1.3	1.9	1.5	2.4	1.6	2.2	3.4	5.4	2.7	2.4	2.2	.0	.5	683	37.7
TOTAL	64	23	50	25	35	25	38	29	43	30	41	64	101	49	46	43	0	9	727	40.2
TOTAL	164	67	124	108	123	108	166	101	130	68	85	109	208	82	103	92	0	13	1810	100.0
PCT	9.1	3.7	6.9	6.0	6.8	6.0	9.2	5.6	7.2	3.8	4.7	6.0	11.5	4.5	5.7	5.1	.0	.7	100.0	

JANUARY

PERIOD: (PRIMARY) 1944-1970  
(OVER-ALL) 1901-1970

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	*	.0	.0	.0	.0	.0	.0	.0	.1	3	.1
	4-10	.1	.0	.0	.0	.0	.0	.0	*	.1	.0	*	*	.0	*	*	.0	.0	.0	9	.4
	11-21	.1	*	.0	.0	.1	*	.2	.0	.1	*	.1	*	.0	*	*	.0	.0	.0	19	.8
	22+	.1	.0	*	.0	.1	.3	.1	*	.1	.0	.0	*	*	.0	.0	.0	.0	.0	19	.8
	TOTAL	6	1	1	0	4	8	7	2	6	2	3	3	1	2	2	0	0	2	50	2.2
1/2<1	0-3	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	.1
	4-10	.1	.0	*	.0	.1	*	.0	.2	*	.0	*	.0	*	.0	.0	*	.0	.0	14	.6
	11-21	.0	.0	*	.0	.2	*	.1	*	.0	*	.0	.0	.0	*	*	.0	.0	.0	12	.5
	22+	.3	.0	*	.0	*	.3	.1	.1	.1	*	.0	*	.3	.1	.0	.2	.0	.0	36	1.6
	TOTAL	8	0	6	0	7	9	4	8	3	2	1	1	7	3	1	5	0	0	65	2.8
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	*	1	*
	4-10	.1	.0	.0	.0	.0	.1	*	*	.0	*	*	.0	*	.0	.1	*	.0	.0	12	.5
	11-21	.1	*	.2	.0	.3	.2	.2	.1	.1	.0	*	.0	.1	*	.1	.1	.0	.0	36	1.6
	22+	.2	.1	.3	.0	.4	.2	.4	.2	.4	.1	.1	.3	.2	*	*	.1	.0	.0	67	2.9
	TOTAL	8	3	10	0	14	11	16	8	10	3	4	6	8	2	6	6	0	1	116	5.1
2<5	0-3	.1	.0	.0	.0	*	.0	*	.0	.0	.0	.0	.0	.0	.0	*	.0	.0	.2	10	.4
	4-10	.5	*	.1	.0	.1	.2	.5	.1	*	*	.2	.2	.1	.1	.1	*	.0	.0	53	2.3
	11-21	.7	.2	.4	.1	.6	.1	.7	.2	.3	.1	*	.1	.3	*	.4	.3	.0	.0	100	4.4
	22+	.6	.2	.3	*	.4	.7	.7	.4	.4	.1	.2	.2	.4	.4	.3	.4	.0	.0	130	5.7
	TOTAL	42	10	19	3	25	22	45	16	16	6	11	12	18	11	17	16	0	4	293	12.8
5<10	0-3	.2	.0	.1	*	.1	*	.1	.0	.0	.0	.0	.0	.1	*	*	.0	.0	.2	21	.9
	4-10	.6	.4	.5	.3	.4	.5	.5	.6	.7	.3	.4	.2	.7	.3	.4	.2	.0	.0	160	7.0
	11-21	1.3	.7	.6	.6	.9	.7	1.6	.7	1.0	.4	.5	.4	1.2	.4	.7	.5	.0	.0	274	12.0
	22+	1.1	.4	1.2	.5	.9	.7	1.1	.8	.9	.7	.6	.8	1.9	.5	.8	.6	.0	.0	309	13.5
	TOTAL	73	35	57	32	53	44	76	47	59	31	34	32	87	26	44	30	0	4	764	33.4
10+	0-3	.2	.0	*	.0	.0	*	.2	.1	.1	.1	.1	.0	*	.0	.0	*	.0	1.0	44	1.9
	4-10	.8	.7	.6	.5	.4	.4	.8	.5	.8	.4	.9	1.1	1.5	1.0	1.0	.7	.0	.0	274	12.0
	11-21	1.7	.5	1.1	1.1	1.1	.7	1.0	.7	1.1	.9	1.4	1.4	2.2	.7	1.2	.9	.0	.0	402	17.6
	22+	1.4	.3	.8	.4	.7	.8	.4	.4	.5	.7	.6	.9	1.7	1.0	.6	.9	.0	.0	277	12.1
	TOTAL	93	33	59	44	51	45	54	39	57	51	68	75	123	62	54	57	0	22	997	43.6
	TOTAL	230	82	152	79	154	139	202	120	151	95	121	129	244	106	134	114	0	33	2285	100.0
	PCT	10.1	3.6	6.7	3.5	6.7	6.1	8.8	5.3	6.6	4.2	5.3	5.6	10.7	4.6	5.9	5.0	.0	1.4	100.0	

PERIOD: (PRIMARY) 1944-1970  
(OVER-ALL) 1901-1970

JANUARY

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8), AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL DBS
00003	4.9	1.5	2.2	19.8	24.0	14.9	1.0	.2	1.2	.2	69.9	30.1	409
06009	9.3	.6	2.8	13.6	25.4	12.1	2.5	.6	.6	.8	68.4	31.6	354
12015	7.2	1.4	3.0	14.6	21.0	11.3	.6	1.7	.6	.0	61.3	38.7	362
18021	9.2	.9	2.4	16.6	25.5	11.3	.9	.6	.0	.3	67.7	32.3	337
TOT	110	16	38	228	350	183	18	11	9	5	978	484	1462
PCT	7.5	1.1	2.6	16.3	23.9	12.5	1.2	.8	.6	.3	66.9	33.1	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL DBS
00003	2.5	3.2	3.2	9.3	28.0	53.8	407
06009	1.4	3.2	6.3	12.4	29.9	46.3	348
12015	2.8	1.4	5.7	9.1	31.1	49.9	351
18021	2.4	1.8	3.9	9.8	33.9	48.2	336
TOT	33	35	68	146	441	719	1442
PCT	2.3	2.4	4.7	10.1	30.6	49.9	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET, NH >4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL DBS
00003	5.2	10.1	34.9	36.1	29.0	407
06009	9.8	15.8	38.2	34.5	27.3	348
12015	7.4	12.5	33.0	31.9	35.0	351
18021	9.2	14.6	35.4	32.7	31.8	336
TOT	112	189	510	489	443	1442
PCT	7.8	13.1	35.4	33.9	30.7	100.0

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PERIOD: (PRIMARY) 1944-1970  
(OVER-ALL) 1901-1970

AREA 0008 DUTCH HARBOR  
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TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP											
TEMP °	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ	
50/24	.0	.0	.0	.0	.0	.1	.0	.0	1	.1	
45/49	.0	.0	.1	.5	.1	.7	.5	.4	38	2.7	
40/44	.0	.0	.3	.5	2.0	2.4	5.1	10.2	295	20.6	
35/39	.0	.0	.1	1.3	5.0	9.0	13.2	20.1	696	48.7	
30/34	.0	.0	.3	.8	1.3	3.8	5.5	5.9	252	17.6	
25/29	.0	.0	.0	.1	1.0	.8	.9	3.9	96	6.7	
20/24	.0	.0	.0	.0	.1	.6	.9	1.5	46	3.2	
15/19	.0	.0	.0	.0	.0	.0	.1	.2	5	.3	
TOTAL	0	0	13	45	137	249	380	605	1429	100.0	
PCT	.0	.0	.9	3.1	9.6	17.4	26.6	42.3			

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP											
	N	NE	E	SE	S	SW	W	NW	VAR	CALM	
	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	
	.2	.6	.3	.3	.3	.1	.8	.0	.0	.0	
	.3	.9	2.3	5.7	3.4	2.4	2.6	1.3	.0	.7	
	3.2	2.8	5.4	7.1	7.2	8.0	9.4	4.4	.0	1.2	
	4.1	2.7	1.4	.8	.7	1.5	3.5	2.8	.0	.2	
	2.3	.8	.3	.4	.0	.3	.5	2.0	.0	.1	
	1.2	1.0	.0	.2	.1	.0	.0	.8	.0	.0	
	.1	.3	.0	.0	.0	.0	.0	.0	.0	.0	
	163	129	153	208	167	177	240	161	.0	31	
	11.4	9.0	10.7	14.6	11.7	12.4	16.8	11.3	.0	2.2	

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR											
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS		
0003	51	48	43	37	25	18	12	36.0	640		
0609	52	46	43	36	23	19	12	35.2	589		
1215	46	44	42	37	26	20	16	35.6	520		
1821	50	47	43	36	24	19	13	35.2	548		
TOT	52	46	43	37	25	19	12	35.5	2297		

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR											
HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS			
0003	.0	3.8	9.0	17.8	25.8	43.8	85	400			
0609	.0	4.4	8.6	16.6	25.5	44.9	85	385			
1215	.0	4.3	14.6	19.3	28.9	32.9	82	301			
1821	.0	4.0	6.9	16.1	27.0	46.0	85	348			
TOT	0	59	137	249	382	607	84	1434			

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PERIOD: (PRIMARY) 1944-1970  
(OVER-ALL) 1901-1970

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	09	13	17	21	25	29	33	37	41	45	49	TOT	W FOG	WD FOG
9/10	.0	.0	.0	.0	.0	.0	.0	.1	.0	.1	.0	2	.0	.1
7/8	.0	.0	.0	.0	.0	.0	.0	.1	.1	.3	.0	8	.1	.5
6	.0	.0	.0	.0	.0	.0	.0	.2	.2	.2	.0	9	.1	.5
5	.0	.0	.0	.0	.0	.0	.0	.2	1.2	.3	.0	27	.3	1.5
4	.0	.0	.0	.0	.0	.0	.0	.3	1.3	.1	.0	25	.6	1.0
3	.0	.0	.0	.0	.0	.0	.0	.5	1.8	.0	.1	35	.1	2.2
2	.0	.0	.0	.0	.0	.0	.3	2.6	3.4	.1	.2	100	.8	5.8
1	.0	.0	.0	.0	.0	.0	.1	3.7	1.0	.0	.1	74	.2	4.7
0	.0	.0	.0	.0	.0	.0	.5	8.3	1.2	.1	.0	154	.5	9.6
-1	.0	.0	.0	.0	.1	.0	2.5	7.1	.7	.0	.0	157	.3	10.0
-2	.0	.0	.0	.0	.3	.1	4.0	5.9	.4	.0	.0	164	.4	10.4
-3	.0	.0	.0	.0	.0	.1	4.5	3.3	.3	.0	.0	124	.2	7.9
-4	.0	.0	.0	.0	.0	.5	5.6	2.2	.2	.0	.0	129	.3	8.1
-5	.0	.0	.0	.0	.3	1.0	4.7	1.4	.1	.0	.0	113	.1	7.3
-6	.0	.0	.0	.0	.4	1.0	3.1	1.1	.0	.0	.0	86	.1	5.6
-7/-8	.0	.0	.0	.3	.9	2.9	3.1	.6	.0	.0	.0	119	.1	7.7
-9/-10	.0	.0	.0	.3	1.5	2.1	1.0	.1	.0	.0	.0	76	.0	5.0
-11/-13	.0	.0	.1	.1	1.9	.7	.3	.0	.0	.0	.0	48	.0	3.1
-14/-16	.0	.0	.0	.8	1.0	.3	.0	.0	.0	.0	.0	32	.0	2.1
-17/-19	.0	.2	.4	1.0	.2	.0	.0	.0	.0	.0	.0	27	.0	1.8
-20/-22	.0	.1	.2	.1	.2	.0	.0	.0	.0	.0	.0	10	.0	.7
-23/-25	.1	.1	.1	.1	.0	.0	.0	.0	.0	.0	.0	7	.1	.4
TOTAL	2	7	13	41	102	134	452	571	180	18	6	1526	61	1465
PCT	.1	.5	.9	2.7	6.7	8.8	29.6	37.4	11.8	1.2	.4	100.0	4.0	96.0

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N					NE					48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47		
<1	.0	.6	.0	.0	.0	.0	.1	.0	.0	.0	.0	1
1-2	.0	.9	.4	.0	.0	.0	.4	.6	.0	.0	.0	8
3-4	.0	.6	1.6	.0	.0	.0	.1	.9	.1	.0	.0	9
5-6	.0	.1	1.4	.5	.1	.0	.4	1.4	.3	.0	.0	16
7	.0	.0	1.3	.4	.1	.0	.0	.5	.3	.0	.0	6
8-9	.0	.3	.5	.4	.0	.0	.0	.3	.5	.0	.0	6
10-11	.0	.0	.0	.4	.0	.0	.0	.1	.6	.0	.0	6
12	.0	.0	.0	.4	.3	.0	.0	.1	.4	.1	.0	5
13-16	.0	.0	.1	1.0	.4	.0	.0	.0	1.6	.5	.0	17
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	0	20	42	24	7	0	8	31	30	5	0	74
PCT	.0	2.5	5.3	3.0	.9	.0	1.0	3.9	3.8	.0	.0	9.4

HGT	E					SE					48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47		
<1	.0	.0	.0	.0	.0	.0	.8	.0	.0	.0	.0	6
1-2	.0	1.3	1.1	.0	.0	.0	.6	1.6	.0	.0	.0	18
3-4	.0	.4	1.8	.0	.0	.0	.5	.9	.3	.0	.0	13
5-6	.0	.3	1.0	.5	.0	.0	.0	1.0	.3	.0	.0	10
7	.0	.0	.5	.1	.1	.0	.1	1.0	.4	.0	.0	12
8-9	.0	.0	.6	.5	.0	.0	.0	.3	.9	.1	.0	10
10-11	.0	.0	.1	.8	.0	.0	.0	.4	1.0	.1	.0	12
12	.0	.0	.0	.1	.1	.0	.1	.1	.3	.3	.0	6
13-16	.0	.0	.0	.3	.6	.0	.1	.3	.8	.3	.0	10
17-19	.0	.0	.1	.1	.1	.0	.0	.0	.0	.0	.0	2
20-22	.0	.0	.1	.0	.1	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	0	15	43	20	10	0	17	44	30	8	0	99
PCT	.0	1.9	5.4	2.5	1.3	.0	2.2	5.6	3.8	1.0	.0	12.5

PERIOD: (PRIMARY) 1963-1970  
 (OVER-ALL)  
 JANUARY  
 TABLE 18  
 AREA 0008 DUTCH HARBOR  
 51-55N 165-172W  
 PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S										SW										TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.1	.1	.0	.0	.0	.0	2	.0	.3	.0	.0	.0	.0	2	.0	.3	.0	.0	.0	.0	.0
1-2	.1	1.3	1.3	.0	.0	.0	21	.1	.9	.6	.0	.0	.0	13	.0	.9	.6	.0	.0	.0	.0
3-4	.0	.4	1.9	.0	.0	.0	18	.0	1.8	1.0	.5	.0	.0	26	.0	1.8	1.0	.5	.0	.0	.0
5-6	.0	.3	.3	.5	.0	.0	8	.0	.4	1.4	.3	.0	.0	16	.0	.4	1.4	.3	.0	.0	.0
7	.0	.1	.4	.4	.0	.0	7	.0	.1	1.5	.4	.0	.0	16	.0	.1	1.5	.4	.0	.0	.0
8-9	.0	.0	.3	.5	.0	.0	6	.0	.0	.5	1.0	.1	.0	13	.0	.0	.5	1.0	.1	.0	.0
10-11	.0	.1	.3	.3	.3	.0	7	.0	.0	.0	.6	.0	.0	5	.0	.0	.0	.6	.0	.0	.0
12	.0	.0	.1	.4	.0	.0	4	.0	.0	.0	.5	.1	.0	5	.0	.0	.0	.5	.1	.0	.0
13-16	.0	.0	.0	.4	.5	.0	7	.0	.1	.1	.8	.1	.0	9	.0	.1	.1	.8	.1	.0	.0
17-19	.0	.0	.0	.0	.1	.0	1	.0	.0	.0	.1	.0	.0	1	.0	.0	.0	.1	.0	.0	.0
20-22	.0	.0	.0	.0	.1	.0	1	.0	.0	.0	.3	.0	.0	2	.0	.0	.0	.3	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.1	.0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.1	.0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0
TOTAL	2	18	35	19	8	0	82	1	28	41	35	4	2	111	.0	28	41	35	4	.0	.0
PCT	.3	2.3	4.4	2.4	1.0	.0	10.4	.1	3.5	5.2	4.4	.5	.3	14.1	.0	3.5	5.2	4.4	.5	.0	.0

HGT	W										NW										TOTAL	GRAND TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	GRAND TOTAL
<1	.0	.5	.0	.0	.0	.0	4	.0	.9	.0	.0	.0	.0	0	.0	.9	.0	.0	.0	.0	.0	20
1-2	.0	1.0	.6	.0	.0	.0	13	.0	.9	1.0	.0	.0	.0	15	.0	.9	1.0	.0	.0	.0	.0	117
3-4	.0	.9	1.1	.6	.0	.0	21	.0	1.4	1.1	.5	.0	.0	24	.0	1.4	1.1	.5	.0	.0	.0	146
5-6	.0	1.3	1.5	.9	.0	.0	29	.0	.5	1.0	.9	.0	.0	19	.0	.5	1.0	.9	.0	.0	.0	129
7	.0	.4	1.8	1.9	.0	.0	32	.0	.1	.6	.6	.0	.0	11	.0	.1	.6	.6	.0	.0	.0	104
8-9	.0	.0	.5	1.4	.0	.0	15	.0	.0	.1	.4	.0	.0	4	.0	.0	.1	.4	.0	.0	.0	72
10-11	.0	.0	.3	1.1	.1	.0	12	.0	.0	.0	.4	.0	.0	3	.0	.0	.0	.4	.0	.0	.0	55
12	.0	.0	.1	.6	.1	.0	7	.0	.0	.0	.1	.0	.0	1	.0	.0	.0	.1	.0	.0	.0	35
13-16	.0	.0	.1	1.1	.4	.0	13	.0	.0	.0	.4	.0	.0	3	.0	.0	.0	.4	.0	.0	.0	78
17-19	.0	.0	.0	.3	.3	.0	4	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	11
20-22	.0	.0	.0	.1	.0	.0	1	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	6
23-25	.0	.0	.0	.0	.3	.0	2	.0	.0	.0	.3	.0	.0	1	.0	.0	.0	.3	.0	.0	.0	10
26-32	.0	.0	.0	.4	.5	.0	7	.0	.0	.0	.5	.0	.0	0	.0	.0	.0	.5	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	0	32	48	67	13	0	160	0	23	31	23	.5	0	81	.0	23	31	23	.5	.0	.0	789
PCT	.0	4.1	6.1	8.5	1.6	.0	20.3	.0	2.9	3.9	2.9	.5	.0	10.3	.0	2.9	3.9	2.9	.5	.0	.0	100.0



PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1970

JANUARY

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	.4	2.4	.0	.0	.0	.0					22
1-2	.3	7.2	7.3	.0	.0	.0					117
3-4	.0	6.1	10.4	2.0	.0	.0					146
5-6	.0	3.2	9.0	4.0	.1	.0					129
7	.0	.9	7.6	4.4	.3	.0					104
8-9	.0	.3	3.0	5.6	.3	.0					72
10-11	.0	.1	1.1	5.2	.5	.0					55
12	.0	.1	.5	2.8	1.0	.0					35
13-16	.0	.1	.6	5.9	3.2	.0					78
17-19	.0	.0	.1	.5	.8	.0					11
20-22	.0	.0	.1	.4	.3	.0					6
23-25	.0	.0	.0	.1	.5	.1					6
26-32	.0	.0	.0	.4	.6	.3					10
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	5	161	315	248	59	3					791
PCT	.6	20.4	39.8	31.4	7.5	.4					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.2	4.4	6.9	4.7	2.7	2.6	.9	.6	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	207	4
6-7	.0	.0	4.9	8.5	4.6	3.2	2.7	1.9	4.7	.7	.1	.1	.1	.0	.0	.0	.0	.0	.0	279	7
8-9	.0	.0	1.2	2.3	4.7	3.6	1.9	1.6	2.6	.6	.3	.0	.0	.0	.0	.0	.0	.0	.0	167	9
10-11	.0	.0	.7	1.5	2.0	1.9	2.8	1.4	2.9	1.1	1.0	.2	.7	.0	.0	.0	.0	.0	.0	144	11
12-13	.0	.0	.0	.1	.3	2.1	.9	.1	.7	.5	.6	.5	.7	.0	.0	.0	.0	.0	.0	57	13
>13	.0	.0	.0	.0	.1	.1	.1	.1	.2	.0	.3	.2	.3	.0	.0	.0	.0	.0	.0	14	19
INDET	1.7	.0	.0	.1	.0	.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	18	1
TOTAL	17	39	121	152	129	120	84	51	102	25	21	9	16	0	0	0	0	0	0	886	8
PCT	1.9	4.4	13.7	17.2	14.6	13.5	9.5	5.8	11.5	2.8	2.4	1.0	1.8	.0	.0	.0	.0	.0	.0	100.0	

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PERIOD: (PRIMARY) 1944-1970  
(OVER-ALL) 1899-1970

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN SHWR	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FOG PCPN	SMOKE HAZE	DUST BLWG	NO SNOW	SIG WEA	
N	.3	.0	.3	.0	1.3	.0	*	1.9	38	.0	.1	.0	*	4.6	135	
NNE	.1	.1	*	.0	1.3	*	.0	1.5	31	.0	*	*	.0	3.8	110	
NE	.6	.1	*	.0	1.5	.0	.0	2.1	43	.0	.2	.1	*	4.6	143	
ENE	.8	.0	.3	.0	.6	.0	.0	1.7	34	.0	.1	.0	.0	3.3	103	
E	.7	.1	.5	.0	.9	.0	.0	1.9	39	*	.4	*	.0	3.2	115	
ESE	.8	*	.5	.0	.3	.0	.0	1.5	31	.0	.1	.0	.0	3.5	105	
SE	1.3	*	.3	.0	.7	.0	.0	2.3	46	.0	.1	.0	.0	5.6	164	
SSE	.8	*	.3	.0	.5	.0	.0	1.6	33	.0	.3	*	.0	4.6	135	
S	.8	.1	.4	.0	.3	.0	.0	1.7	34	.0	.3	.1	.0	7.4	194	
SSW	.6	.1	.2	.0	.2	.0	.0	1.1	23	.0	.2	.0	.0	4.3	114	
SW	.4	*	.2	.0	.7	.0	.1	1.5	31	.0	*	*	*	4.7	130	
WSW	.6	.1	.1	.0	.7	*	.0	1.4	29	.0	.2	.0	*	5.0	136	
W	.3	.1	.2	*	.8	.0	*	1.4	29	.0	.1	.0	.0	6.7	168	
WNW	.2	.0	.0	.0	.8	.0	.1	1.1	23	.0	.0	.0	.0	3.4	93	
NW	*	.0	.0	.0	1.2	.0	*	1.3	27	.0	.0	.0	.0	3.9	107	
NNW	.1	.0	.0	.0	.5	.0	.0	.5	11	.0	*	.0	.0	3.0	74	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0	
CALM	*	*	*	.0	.0	.0	.0	.0	5	.0	*	*	*	.3	14	
TOT OBS	175	22	75	1	254	2	8	.2	507	1	51	10	5	1466	2040	
TOT PCT	8.6	1.1	3.7	*	12.5	.1	.4	24.9		*	2.5	.5	.2	71.9	100.0	

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN SHWR	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FOG PCPN	SMOKE HAZE	DUST BLWG	NO SNOW	SIG WEA	
00003	6.6	.9	3.2	.2	13.3	.2	.4	23.7	125	.0	3.0	.8	.4	72.2	528	
06009	9.6	.6	4.0	.0	12.1	.2	.2	25.1	131	.0	2.5	.6	.4	71.5	522	
12015	8.5	1.8	3.8	.0	8.7	.0	.6	21.8	108	.0	1.8	.2	.2	76.0	495	
18021	9.5	1.0	3.6	.0	15.6	.0	.4	28.4	144	.2	2.6	.4	.0	68.4	507	
TOT	175	22	75	1	255	2	8	.2	508	1	51	10	5	1477	2052	
PCT	8.5	1.1	3.7	*	12.4	.1	.4	24.8		*	2.5	.5	.2	72.0	100.0	

FEBRUARY

PERIOD: (PRIMARY) 1944-1970  
(OVER-ALL) 1899-1970

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)					48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)								
	0-3	4-10	11-21	22-33	34-47					00	03	06	09	12	15	18	21	
N	.4	2.0	2.4	1.8	.3	*	176	7.0	16.8	5.7	3.1	8.0	5.1	7.0	11.8	7.6	6.6	
NNE	.2	.6	2.2	1.5	.2	.0	118	4.7	18.6	4.8	3.1	3.5	6.1	5.9	.8	5.7	5.5	
NE	.4	1.3	2.6	2.1	.3	.0	167	6.7	18.7	7.1	3.1	7.0	4.0	5.2	8.7	8.1	4.4	
ENE	.0	.7	2.0	1.3	.3	*	111	4.4	19.4	4.7	11.3	4.6	2.0	4.9	.8	4.1	2.2	
E	.2	1.1	2.2	1.4	.6	.1	142	5.7	19.8	8.6	4.1	4.6	6.1	4.0	7.1	5.2	3.3	
ESE	*	.9	2.0	1.3	.5	*	121	4.8	20.3	5.0	6.2	4.4	7.1	3.5	7.1	4.4	7.7	
SE	.6	1.2	3.5	2.3	.9	.2	219	8.8	19.9	8.6	12.4	11.5	10.1	6.3	7.1	7.8	7.7	
SSE	.0	1.2	2.4	2.0	.6	.1	159	6.4	20.5	5.7	14.4	5.2	8.1	5.6	7.9	5.4	14.3	
S	.2	1.7	3.4	2.8	1.0	.1	232	9.3	20.2	8.3	7.2	9.8	11.1	10.8	9.4	7.6	15.4	
SSW	.4	.8	1.8	1.9	.9	*	147	5.9	20.7	6.0	7.2	5.2	7.1	6.8	6.3	4.6	8.8	
SW	.5	2.1	2.2	1.6	.5	.3	179	7.2	18.4	5.9	5.2	7.6	11.1	5.9	7.9	9.1	4.4	
WSW	.1	.9	2.2	2.3	.8	.2	160	6.4	22.7	6.9	6.2	5.9	2.0	6.1	7.1	7.6	4.4	
W	.4	1.5	3.8	1.7	.6	.1	202	8.1	18.9	7.9	7.2	7.8	5.1	11.0	4.7	8.3	4.4	
WNW	*	1.2	1.6	1.3	.2	.0	110	4.4	18.0	4.0	4.1	3.5	5.1	5.6	6.3	4.8	1.1	
NW	.1	1.5	2.0	1.5	.4	.1	138	5.5	18.8	6.2	4.1	6.9	5.1	6.1	1.6	4.3	5.5	
NNW	.1	.6	1.8	1.0	.2	.0	92	3.7	18.3	3.6	1.0	3.1	3.0	4.4	5.5	3.9	3.3	
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	1.1	486	956	695	212	34	28	1.1	.0	.9	.0	1.3	2.0	.9	.0	1.7	1.1	
TOT OBS	118	19.4	38.2	27.8	8.5	1.4	2501	100.0	19.2	579	97	540	99	427	127	541	91	
TOT PCT	4.7							100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-6	7-16	17-27	28-40	00					03	06	09	12	15	18	21	
N	1.3	4.3	4.7	1.4	.1	294	11.8	17.5		10.5	6.2	11.5	11.1	12.9	12.6	13.3	12.1
NE	1.4	3.4	3.9	2.2	.2	278	11.1	19.0		11.7	14.4	11.7	6.1	10.1	9.4	12.2	6.6
E	1.1	3.2	3.8	1.9	.4	263	10.5	20.0		13.6	10.3	9.1	13.1	7.5	14.2	9.6	11.0
SE	1.5	4.5	5.5	2.8	.7	378	15.1	20.2		14.3	26.8	16.7	18.2	11.9	15.0	13.1	22.0
S	1.6	4.4	5.8	2.7	.8	379	15.2	20.4		14.3	14.4	15.0	18.2	17.6	15.7	12.2	24.2
SW	1.6	4.4	4.2	2.3	1.1	339	13.6	20.4		12.8	11.3	13.5	13.1	11.9	15.0	16.6	8.8
W	1.2	4.7	4.2	2.1	.3	312	12.5	18.6		11.9	11.3	11.3	10.1	16.6	11.0	13.1	5.5
NW	1.2	3.0	3.4	1.4	.2	230	9.2	18.6		9.8	5.2	10.0	8.1	10.5	7.1	8.1	8.8
VAR	.0	.0	.0	.0	.0	0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.1	800	890	420	94	28	1.1	.0		.9	.0	1.3	2.0	.9	.0	1.7	1.1
TOT OBS	297	32.0	35.6	15.8	3.8	2501	100.0	19.2		579	97	540	99	427	127	541	91
TOT PCT	11.9						100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

WIND SPEED (KNOTS)	000	0300	0600	0900	1200	1500	1800	2100	2400	TOTAL
0003	4.1	19.5	38.5	28.1	7.8	1.2	.7	19.1	100.0	676
0609	4.1	19.6	38.5	24.9	9.7	1.9	1.4	19.3	100.0	639
1215	2.0	15.7	39.5	30.7	9.7	1.6	.7	20.5	100.0	554
1821	4.0	22.5	35.6	27.8	5.8	.8	1.6	18.1	100.0	632
TOT	90	486	956	695	212	34	28	19.2	100.0	2501
PCT	3.6	19.4	38.2	27.8	8.5	1.4	1.1	100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	0-2	3-4	5-7	8-10	TOTAL	MEAN CLOUD COVER
N	.3	.6	2.6	2.7	105	6.6
NNE	.2	.4	1.5	3.2	89	6.9
NE	.4	.3	1.6	4.2	109	7.0
ENE	.3	.6	1.0	2.6	75	6.6
E	.6	.2	1.1	3.8	95	6.8
ESE	.2	.4	1.4	3.5	93	7.0
SE	1.0	.6	2.0	3.9	125	6.3
SSE	1.0	.7	2.0	3.0	112	6.2
S	1.2	1.4	3.1	4.4	170	6.0
SSW	1.2	.7	1.8	2.8	109	5.7
SW	1.1	.9	2.4	1.4	97	5.4
WSW	1.1	.7	2.6	2.7	118	5.9
W	1.4	1.6	4.2	1.8	152	5.3
WNW	.3	.5	2.0	1.6	74	6.2
NW	.5	.2	2.2	2.0	83	6.4
NNW	.2	1.0	1.2	1.5	65	6.1
VAR	.0	.0	.0	.0	0	.0
CALM	.1	.2	.2	.0	8	3.9
TOT OBS	184	182	554	759	1679	6.2
TOT PCT	11.0	10.8	33.0	45.2	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8	TOTAL
N	.2	.3	.3	1.1	2.7	.5	.1	.0	.0	.0	1.0	105
NNE	.2	.0	.1	1.1	2.4	.5	.1	.0	.0	.0	.9	89
NE	.3	.0	.5	1.5	2.4	.7	.0	.1	.0	.0	1.0	109
ENE	.3	.1	.4	.8	1.1	.4	.1	.0	.0	.0	1.4	75
E	.4	.1	.3	.8	2.1	.4	.1	.2	.1	.1	1.3	95
ESE	.4	.0	.2	.7	2.6	.4	.1	.0	.1	.1	1.2	93
SE	.5	.1	.2	.8	2.3	.7	.1	.1	.0	.0	2.6	125
SSE	.8	.0	.3	.7	1.8	.5	.0	.0	.1	.0	2.6	112
S	1.3	.1	.2	1.4	2.3	.5	.1	.2	.1	.0	4.1	170
SSW	.4	.1	.2	1.1	1.3	.6	.1	.1	.0	.1	2.5	109
SW	.3	.1	.2	.8	1.5	.5	.1	.0	.0	.0	2.4	97
WSW	.3	.0	.3	1.4	2.2	.4	.2	.1	.0	.0	2.1	118
W	.4	.1	.0	1.1	2.7	.6	.3	.0	.0	.0	3.9	152
WNW	.3	.1	.0	1.0	1.6	.3	.0	.0	.0	.0	1.1	74
NW	.2	.1	.1	.7	2.0	.7	.0	.0	.1	.0	1.3	83
NNW	.2	.0	.0	.4	1.6	.4	.1	.0	.0	.0	1.2	65
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	8
TOT OBS	107	17	54	257	549	133	25	13	4	.4	516	1679
TOT PCT	6.4	1.0	3.2	15.3	32.7	7.9	1.5	.8	.2	.2	30.7	100.0

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)											
CEILING (FEET)	OR		OR		OR		OR		OR		OR
	>10	>5	>4	>2	>1	>1/2	>1/4	>50YD	>0		
OR >6500	.3	.4	1.2	.5	.5	.5	.5	.5	.5	.5	
OR >5000	.8	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	
OR >3500	1.6	2.6	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	
OR >2000	5.8	9.5	10.3	10.5	10.5	10.6	10.6	10.6	10.6	10.6	
OR >1000	19.0	33.2	39.5	42.0	42.9	43.2	43.2	43.2	43.2	43.2	
OR >600	23.1	42.2	53.1	57.0	58.1	58.6	58.6	58.6	58.6	58.6	
OR >300	23.5	43.8	55.4	59.8	61.1	61.7	61.7	61.7	61.7	61.7	
OR >150	23.7	44.5	56.2	60.8	62.1	62.7	62.7	62.7	62.7	62.7	
OR > 0	24.0	46.6	59.6	65.1	67.2	68.5	69.0	69.0	69.0	69.0	
TOTAL	403	783	1003	1095	1131	1153	1161	1161	1161	1161	

TOTAL NUMBER OF OBS: 1682
PCT FREQ NH <5/8: 31.0

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

									TOTAL
0	1	2	3	4	5	6	7	8	OBSCD OBS
3.2	5.3	8.6	7.4	6.3	5.5	10.7	11.9	35.6	5.6 1741

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.0	.0	*	.1	.2	*	.0	*	.2	.0	.1	.1	*	*	.1	.0	.0	.0	23	1.1
NO PCP	.0	.0	*	.0	.1	.0	.1	.2	.1	.1	*	.1	*	*	.0	.0	.0	.0	20	1.0
TOTAL	0	0	2	3	7	1	2	5	7	3	4	4	2	1	2	0	0	0	43	2.1
PCP	.0	.1	.2	.1	.2	.1	.2	.1	.3	*	*	.1	*	.1	.1	.0	.0	.0	41	2.0
NO PCP	.0	.1	.1	.1	.0	.1	.0	.2	.1	*	*	*	*	*	.0	.0	.0	.0	20	1.0
TOTAL	0	4	8	4	6	5	5	6	8	2	2	4	2	3	2	0	0	0	61	3.0
PCP	.4	.3	.5	.5	.1	.3	.2	.2	.2	.2	.5	.2	.1	.1	.2	*	.0	*	92	4.5
NO PCP	.1	.1	.3	.1	.1	.1	.2	*	.3	.1	.1	.1	.0	.1	.0	.1	.0	.0	44	2.2
TOTAL	11	9	17	12	6	9	10	6	12	7	12	7	3	6	5	3	0	1	136	5.7
PCP	.5	.6	.7	.3	.5	.5	.5	.5	.3	.4	.3	.3	.3	.2	.3	.3	.0	*	139	6.8
NO PCP	.6	.5	.7	.2	.4	.4	.7	.5	.7	.3	.7	.7	.7	.4	.5	.2	.0	*	170	8.3
TOTAL	23	22	29	12	19	18	25	22	20	16	21	20	20	13	17	10	0	2	309	15.2
PCP	.8	.5	.6	.5	.7	.5	1.2	.6	.6	.3	.4	.6	.7	.3	.6	.2	.0	.1	191	9.4
NO PCP	1.3	1.1	1.6	1.0	1.3	1.3	1.8	1.6	2.6	1.5	1.5	1.7	1.7	1.0	2.0	1.3	.0	.1	493	24.2
TOTAL	42	32	44	32	40	36	62	45	65	38	39	46	50	27	52	30	0	4	684	33.6
PCP	.1	*	.1	*	.1	*	.0	.1	.0	*	*	*	.1	.2	.0	.0	.0	*	22	1.1
NO PCP	2.7	2.1	2.1	1.9	1.6	1.7	2.9	2.4	4.0	2.3	2.5	2.6	4.3	1.9	1.5	1.5	.0	.3	783	38.4
TOTAL	58	43	44	40	36	36	60	50	82	48	51	55	91	43	30	31	0	7	805	39.5
TOTAL	134	110	144	103	114	105	164	134	194	114	129	136	168	93	108	74	0	14	2038	100.0
PCT	6.6	5.4	7.1	5.1	5.6	5.2	8.0	6.6	9.5	5.6	6.3	6.7	8.2	4.6	5.3	3.6	.0	.7	100.0	

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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.1	.1	.1	.0	*	.0	.0	.0	.0	.0	.0	11	.4
	11-21	.0	.0	.0	.0	.0	.0	*	.1	.1	.0	.1	.1	.0	.0	.0	.0	.0	.0	17	.7
	22+	.0	.0	.0	.0	.0	.0	*	.1	.1	*	.1	*	.1	*	.1	.0	.0	.0	22	.9
	TOTAL	0	0	2	3	7	3	2	6	8	4	5	5	2	1	2	0	0	0	50	2.0
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	*	.0	.0	.0	.0	.0	.0	.0	.0	1	*
	4-10	.0	.0	.1	.0	.0	.1	.0	.0	.1	.0	*	.0	.0	.1	*	.0	.0	.0	11	.4
	11-21	.0	.0	.0	.1	.1	.0	.1	.1	.0	.0	.0	.0	*	.0	*	.0	.0	.0	15	.6
	22+	.0	.1	.2	.1	.2	.1	.1	.1	.2	*	*	.2	*	*	.0	.0	.0	.0	36	1.5
	TOTAL	0	4	8	4	7	5	5	6	8	2	2	5	2	3	2	0	0	0	63	2.5
1<2	0-3	.1	.0	.0	.0	.1	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.1	9	.4
	4-10	.1	*	.2	.0	.0	*	*	*	*	.0	.1	*	.1	.2	.1	.0	.0	.0	23	.9
	11-21	.1	.2	.1	.2	.0	.1	*	*	.2	.1	.1	*	*	.2	.0	.0	.0	.0	35	1.4
	22+	.2	.2	.5	.3	.2	.2	.4	.3	.3	.2	.3	.2	.1	*	.1	.1	.0	.0	90	3.6
	TOTAL	13	10	18	13	7	9	11	9	14	9	12	8	5	9	5	3	0	2	157	6.4
2<5	0-3	.0	*	.1	.0	.0	.0	.1	.0	.0	*	*	.0	*	.0	.0	.0	.0	.2	13	.5
	4-10	.3	*	.3	.2	.0	.1	.2	*	.2	.1	.3	.1	.2	.2	.1	*	.0	.0	59	2.4
	11-21	.3	.4	.5	.1	.3	.3	.3	.2	.3	.1	.2	.1	.1	.1	.2	.3	.0	.0	95	3.8
	22+	.5	.5	.6	.3	.5	.4	.7	.8	.4	.5	.5	.7	.5	.3	.5	.2	.0	.0	200	8.1
	TOTAL	29	24	39	15	20	20	31	25	23	18	26	22	22	15	20	14	0	4	367	14.9
5<10	0-3	*	.0	.1	.0	.0	.0	.3	.0	.1	.1	.3	.1	.2	.0	.1	*	.0	.5	46	1.9
	4-10	.7	.1	.2	.2	.5	.2	.4	.4	.3	.2	.7	.2	.5	.2	.6	.2	.0	.0	143	5.8
	11-21	.8	.6	.8	.6	.6	.6	1.4	.8	1.1	.7	.6	.8	.9	.5	1.1	.6	.0	.0	307	12.4
	22+	.7	.6	.7	.6	.9	.8	1.4	.8	1.3	1.1	.8	1.1	.8	.4	.8	.6	.0	.0	333	13.5
	TOTAL	57	33	46	33	49	39	86	51	72	52	61	54	60	29	61	34	0	12	829	33.5
10+	0-3	.2	.1	.1	.0	.2	*	.2	.0	.1	.1	.2	.0	.1	*	.0	*	.0	.4	48	1.9
	4-10	.9	.4	.5	.4	.6	.4	.6	.6	.9	.4	.9	.5	.7	.5	.7	.4	.0	.0	235	9.5
	11-21	1.2	1.0	1.1	1.0	1.2	.9	1.6	1.1	1.6	1.0	1.2	1.1	2.7	.8	.7	.9	.0	.0	471	19.1
	22+	.7	.3	.4	.3	.1	.3	.8	.6	1.5	1.0	.6	.9	.9	.7	.6	.3	.0	.0	251	10.2
	TOTAL	76	46	52	42	50	43	80	58	102	62	71	64	109	52	48	40	0	10	1005	40.7
	TOTAL	175	117	165	110	140	119	215	155	227	147	177	158	200	109	138	91	0	28	2471	100.0
	PCT	7.1	4.7	6.7	4.5	5.7	4.8	8.7	0.3	9.2	5.9	7.2	6.4	8.1	4.4	5.6	3.7	.0	1.1	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET,NH >4/8),AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	4.6	1.4	3.6	18.9	31.0	6.2	1.4	1.6	.5	.5	69.5	30.5	439
06009	8.6	.7	2.7	14.3	33.9	9.5	2.0	.9	.0	.2	72.9	27.1	442
12015	5.8	.8	3.5	14.2	31.6	10.6	.8	.3	.3	.0	67.8	32.2	395
18021	6.1	1.2	2.8	13.2	32.9	5.2	1.7	.2	.2	.2	63.8	36.2	423
TOT	107	17	54	258	550	133	25	13	4	4	1165	534	1699
PCT	6.3	1.0	3.2	15.2	32.4	7.8	1.5	.8	.2	.2	68.6	31.4	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1.2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	3.0	2.5	4.8	12.6	25.2	51.8	436
06009	2.3	2.1	7.1	13.8	30.1	44.6	435
12015	.8	2.1	4.4	16.9	34.1	41.8	390
18021	1.2	2.1	6.7	14.7	28.0	47.3	421
TOT	31	37	97	243	492	782	1682
PCT	1.8	2.2	5.8	14.4	29.3	46.5	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET,NH >4/8),BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND5+	NH <5/8 AND 5+	TOTAL OBS
00003	4.6	12.4	37.4	33.0	29.6	436
06009	8.5	13.1	37.2	38.2	24.6	435
12015	5.9	11.8	38.7	32.1	29.2	390
18021	6.2	11.4	37.3	29.2	33.5	421
TOT	106	205	633	558	491	1682
PCT	6.3	12.2	37.6	33.2	29.2	100.0



FEBRUARY

PERIOD: (PRIMARY) 1944-1970  
(OVER-ALL) 1899-1970

AREA 0008 DUTCH HARBOR  
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TABLE 13

TEMP F	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP										TOTAL OBS	PCT FREQ
	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100				
50/54	.0	.0	.0	.1	.1	.0	.2	.0			7	.4
45/49	.0	.0	.0	.2	.1	.5	.3	.6			30	1.8
40/44	.0	.1	.1	.2	1.2	3.7	5.1	8.7			321	18.9
35/39	.0	.0	.1	1.2	3.7	9.5	13.8	21.2			840	49.5
30/34	.0	.0	.1	.1	.9	3.1	6.4	7.9			313	18.4
25/29	.0	.0	.1	.2	.5	1.0	1.6	4.5			134	7.9
20/24	.0	.0	.0	.0	.1	.9	1.3	.8			53	3.1
TOTAL	0	2	6	33	111	317	486	743			1698	100.0
PCT	.0	.1	.4	1.9	6.5	18.7	28.6	43.8				

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP											VAR	CALM
N	NE	E	SE	S	SW	W	NW					
.1	.0	.0	.1	.0	.2	.1	.0				.0	.0
.2	.1	.2	.3	.3	.4	.2	.1				.0	.0
.6	1.4	2.0	4.2	5.7	3.2	.8	.5				.0	.5
3.2	4.2	5.5	8.0	9.4	8.2	6.2	3.9				.0	.6
4.1	2.8	1.8	1.1	1.1	1.9	2.9	2.5				.0	.2
2.5	1.8	.2	.2	.2	.4	1.4	1.2				.0	.0
1.9	.6	.0	.0	.0	.1	.1	.5				.0	.0
216	185	166	235	282	244	197	149				0	24
12.7	10.9	9.8	13.8	16.6	14.4	11.6	8.8				.0	1.4

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR										TOTAL OBS
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN		
00003	52	49	44	37	27	22	19	36.9		669
06009	50	45	43	37	27	21	20	35.9		642
12015	45	43	41	36	26	21	20	35.2		551
18021	48	44	42	36	26	20	20	35.5		629
TOT	52	45	42	37	27	21	19	35.9		2491

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR										TOTAL OBS
HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN			
00003	.0	2.6	8.6	21.0	24.7	43.0	84			453
06009	.0	2.2	5.8	19.1	28.9	43.9	85			446
12015	.0	3.2	6.4	15.2	32.7	41.6	85			346
18021	.0	1.8	5.3	17.8	29.2	46.1	86			456
TOT	0	41	111	317	487	745	85			1701

FEBRUARY

PERIOD: (PRIMARY) 1944-1970  
(OVER-ALL) 1899-1970

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	17	21	25	29	33	37	41	45	49	TOT	W FOG	WD FOG
9/10	.0	.0	.0	.0	.0	.0	.0	.1	.1	3	.0	.2
7/8	.0	.0	.0	.0	.0	.0	.1	.2	.0	5	.1	.2
6	.0	.0	.0	.0	.1	.2	.2	.1	.0	10	.1	.5
5	.0	.0	.0	.0	.0	.3	.8	.2	.0	24	.1	1.3
4	.0	.0	.0	.0	.0	.6	2.2	.1	.0	51	.3	2.6
3	.0	.0	.0	.0	.2	2.0	1.1	.0	.0	59	.1	3.2
2	.0	.0	.0	.1	.2	3.5	1.6	.1	.0	97	.2	5.2
1	.0	.0	.0	.0	.6	5.8	.7	.0	.0	127	.1	7.0
0	.0	.0	.1	.0	1.9	10.5	.8	.0	.0	239	.4	12.9
-1	.0	.0	.0	.1	4.9	5.9	.2	.0	.0	197	.2	10.8
-2	.0	.0	.1	.2	6.7	4.6	.2	.0	.0	211	.3	11.5
-3	.0	.0	.1	.2	4.5	2.6	.0	.0	.0	131	.2	7.1
-4	.0	.0	.1	.8	3.9	1.4	.0	.0	.0	112	.2	6.1
-5	.0	.0	.1	1.0	4.6	.6	.0	.0	.0	113	.2	6.1
-6	.0	.0	.3	1.6	2.0	.3	.0	.0	.0	74	.0	4.1
-7/-8	.0	.0	.6	3.2	1.9	.4	.0	.0	.0	110	.0	6.1
-9/-10	.0	.1	2.1	2.5	.6	.0	.0	.0	.0	93	.0	5.2
-11/-13	.0	.6	2.3	.8	.2	.0	.0	.0	.0	69	.0	3.8
-14/-16	.1	1.8	.8	.2	.0	.0	.0	.0	.0	51	.0	2.8
-17/-19	.5	.4	.0	.0	.0	.0	.0	.0	.0	16	.0	.9
-20/-22	.0	.1	.1	.0	.0	.0	.0	.0	.0	2	.0	.1
TOTAL	10	52	115	188	578	697	142	11	1	1794	40	1754
PCT	.6	2.9	6.4	10.5	32.2	38.9	7.9	.6	.1	100.0	2.2	97.8

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N							NE							48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL		
<1	.1	.2	1.5	.0	.0	.0	3	.0	.1	.0	.0	.0	.0	1		
1-2	.1	1.2	1.5	.0	.0	.0	28	.2	1.0	1.4	.0	.0	.0	26		
3-4	.0	.6	1.5	.5	.0	.0	26	.2	.1	1.8	1.2	.0	.0	33		
5-6	.0	.3	1.1	.7	.0	.0	21	.0	.2	.6	.3	.1	.0	12		
7	.0	.0	.7	1.0	.0	.0	17	.0	.0	.6	.8	.1	.0	15		
8-9	.0	.1	.6	.3	.4	.0	14	.0	.1	.7	.6	.2	.0	16		
10-11	.0	.0	.1	.2	.0	.0	3	.0	.0	.0	.6	.1	.1	8		
12	.0	.0	.0	.1	.2	.0	3	.0	.0	.0	.2	.0	.0	2		
13-16	.0	.0	.0	.2	.1	.0	3	.0	.0	.0	.2	.1	.0	3		
17-19	.0	.0	.0	.1	.3	.0	4	.0	.0	.0	.1	.1	.0	3		
20-22	.0	.0	.0	.2	.0	.0	2	.0	.0	.0	.1	.3	.0	4		
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.1	.0	.0	1		
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
TOTAL	2	2.4	5.4	3.3	1.0	.0	12.4	4	1.5	5.1	4.3	1.0	1	12.4		
PCT	.2	2.4	5.4	3.2	1.0	.0	12.2	.4	1.5	5.0	4.2	1.0	.1	12.2		

HGT	E										SE										48+	TOTAL
<1	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL								
1-2	.1	.3	.0	.0	.0	.0	4	.1	.3	.0	.0	.0	.0	4								
3-4	.1	.9	.7	.0	.0	.0	17	.1	.3	1.3	.0	.0	.0	17								
5-6	.0	.1	1.0	.3	.0	.0	14	.0	.7	2.7	.7	.0	.0	41								
7	.0	.1	.7	.5	.2	.0	15	.0	.2	1.6	.8	.0	.0	26								
8-9	.0	.3	.5	.4	.1	.0	13	.0	.1	1.0	.9	.1	.0	21								
10-11	.0	.0	.5	.6	.0	.0	11	.0	.2	.3	1.0	.3	.0	18								
12	.0	.0	.4	.3	.3	.0	10	.0	.0	.1	1.0	.5	.0	16								
13-16	.0	.0	.0	.4	.3	.0	7	.0	.0	.0	.3	.2	.0	5								
17-19	.0	.0	.0	.6	1.0	.1	17	.0	.0	.0	.4	.1	.0	5								
20-22	.0	.0	.0	.0	.2	.0	2	.0	.0	.0	.0	.0	.0	0								
23-25	.0	.0	.0	.1	.2	.0	3	.0	.0	.0	.0	.0	.0	0								
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.1	.1	.0	2								
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
TOTAL	2	1.7	3.7	3.1	2.3	.1	11.3	2	1.8	6.9	5.1	1.3	.0	15.2								
PCT	.2	1.7	3.7	3.1	2.3	.1	11.1	.2	1.8	6.9	5.1	1.3	.0	15.2								

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S										TOTAL	48+	SW				48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	1-3	4-10	11-21	22-33	34-47		1-3	4-10	11-21	22-33	34-47	
<1	.2	.3	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	2
1-2	.1	.6	.6	.0	.0	.0	.3	.6	.5	.0	.0	.0	.0	.6	.5	.0	.0	11
3-4	.0	.5	1.9	.6	.0	.0	.0	.9	1.4	.1	.0	.0	.0	.9	1.4	.0	.0	24
5-6	.0	.4	2.2	.9	.1	.0	.0	.1	1.3	.9	.0	.0	.0	.0	1.3	.0	.0	23
7	.0	.2	.8	1.0	.0	.0	.0	.0	.6	1.0	.1	.0	.0	.0	.6	.0	.0	17
8-9	.0	.0	.2	1.2	.3	.0	.0	.0	.3	.7	.2	.0	.0	.0	.3	.0	.0	13
10-11	.0	.0	.3	.5	.2	.0	.0	.0	.1	1.0	.2	.0	.0	.0	.1	.0	.0	13
12	.0	.0	.0	.2	.1	.0	.0	.0	.3	.4	.3	.0	.0	.0	.2	.0	.0	13
13-16	.0	.0	.0	.5	.5	.0	.0	.0	.2	.2	.7	.0	.0	.0	.1	.0	.0	12
17-19	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2
20-22	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	1
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	2
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	3	20	60	50	16	1	2	17	47	43	19	7	2	17	47	43	19	135
PCT	.3	2.0	5.9	4.9	1.6	.1	.2	1.7	4.6	4.2	1.9	.7	.2	1.7	4.6	4.2	1.9	13.3

HGT	W										TOTAL	48+	NW				48+	TOTAL	GRAND TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	1-3	4-10	11-21	22-33	34-47		1-3	4-10	11-21	22-33	34-47		
<1	.0	.0	.0	.0	.0	.0	.2	.1	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	22
1-2	.1	.5	1.0	.0	.0	.0	.0	.4	.4	.0	.0	.0	.0	.4	.0	.0	.0	.0	136
3-4	.1	.7	2.2	.2	.0	.0	.0	.2	.7	.2	.0	.0	.0	.2	.0	.0	.0	.0	211
5-6	.1	.2	1.0	.6	.1	.0	.0	.0	1.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	165
7	.0	.3	.8	.9	.2	.0	.0	.1	.6	.9	.0	.0	.0	.1	.6	.0	.0	.0	141
8-9	.0	.0	.3	.6	.3	.0	.0	.0	.0	.6	.1	.0	.0	.0	.0	.0	.0	.0	108
10-11	.0	.0	.4	.5	.0	.0	.0	.0	.2	.4	.2	.0	.0	.0	.2	.0	.0	.0	77
12	.0	.0	.2	.4	.2	.0	.0	.0	.1	.3	.3	.0	.0	.0	.3	.0	.0	.0	48
13-16	.0	.0	.1	.5	.3	.0	.0	.0	.3	.1	.2	.0	.0	.0	.1	.0	.0	.0	66
17-19	.0	.0	.0	.0	.1	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	15
20-22	.0	.0	.0	.1	.3	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	19
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	6
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	3	17	60	38	15	2	2	8	34	29	8	0	2	8	34	29	8	81	1017
PCT	.3	1.7	5.9	3.7	1.5	.2	.2	.8	3.3	2.9	.8	.0	.2	.8	3.3	2.9	.8	8.0	100.0

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1970

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TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)							TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+		
<1	1.3	1.3	.0	.0	.0	.0	.0	26
1-2	.7	5.4	7.2	.0	.0	.0	.0	136
3-4	.3	3.7	12.9	3.7	.0	.0	.0	211
5-6	.1	1.5	9.3	4.8	.5	.0	.0	165
7	.0	1.0	5.5	6.8	.6	.0	.0	141
8-9	.0	.4	2.8	5.5	1.9	.0	.0	108
10-11	.0	.0	1.6	4.4	1.5	.1	.1	77
12	.0	.1	.6	2.3	1.6	.2	.2	48
13-16	.0	.0	.1	2.6	2.9	.3	.3	66
17-19	.0	.0	.1	.4	.8	.2	.1	15
20-22	.0	.0	.0	.6	1.2	.1	.1	19
23-25	.0	.0	.0	.3	.2	.1	.2	6
26-32	.0	.0	.0	.0	.1	.0	.0	3
33-40	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	24	136	415	320	114	12	1021	
PCT	2.4	13.3	40.6	31.3	11.2	1.2	100.0	

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+ TOTAL	MEAN HGT	
<6	.2	2.6	5.9	4.6	2.9	2.2	1.2	.6	.3	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	225	5
6-7	.0	.2	5.0	7.1	4.8	3.4	4.0	1.8	3.5	1.3	1.0	.1	.1	.0	.0	.0	.0	.0	.0	353	8
8-9	.0	.1	2.0	3.6	7.2	3.3	3.2	2.0	1.3	.5	.4	.3	.0	.0	.0	.0	.0	.0	.0	260	8
10-11	.0	.0	.6	1.8	1.9	3.7	2.1	1.6	2.7	.3	.1	.3	.0	.0	.0	.0	.0	.0	.0	167	9
12-13	.0	.0	.5	.0	.2	.5	.8	.5	.5	.0	.0	.1	.1	.0	.0	.0	.0	.0	.0	34	10
>13	.0	.0	.0	.0	.2	.0	.3	.5	.6	.1	.3	.0	.5	.0	.0	.0	.0	.0	.0	28	16
INDET	2.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	27	0
TOTAL	29	31	153	187	188	144	127	78	97	25	19	8	.7	.0	.0	.0	.0	.0	.0	1094	7
PCT	2.7	2.8	14.0	17.1	17.2	13.2	11.6	7.1	8.9	2.3	1.7	.7	.7	.0	.0	.0	.0	.0	.0	100.0	

MARCH

PERIOD: (PRIMARY) 1942-1970  
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TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW	OTHER FRZN PCPN					FOG WD PCPN	SMOKE	DUST BLWG	DUST SNOW	SIG WEA	
N	.3	*	.2	.0	1.0	*	.0	1.5	32	.0	.2	.0	.0	.0	6.7	182
NNE	.4	*	.0	.0	.5	.0	.0	.8	18	.0	*	.0	.0	.0	2.8	80
NE	.5	*	.1	.0	.8	.0	.0	1.4	30	.0	.2	.0	.0	.0	4.0	122
ENE	.2	*	.3	.0	.9	.0	.0	1.3	29	.0	.1	.0	.0	.0	4.5	129
E	.4	.0	.2	.0	.4	.0	.0	.9	20	.0	.2	*	*	*	4.3	121
ESE	.2	.0	.5	.0	.3	*	.0	1.0	22	.0	.5	*	.0	.0	2.7	92
SE	.6	.0	.4	.0	.6	.1	.0	1.6	34	.0	.6	.0	.0	.0	5.1	159
SSE	.4	.1	.3	.0	.1	.0	.0	1.1	23	.0	.3	*	.0	.0	4.6	131
S	.8	*	.3	.0	.6	*	.0	1.7	36	.0	.7	*	.0	.0	5.0	162
SSW	.5	.0	.2	.0	.1	.0	.0	.7	15	.0	.5	*	.0	.0	3.5	103
SW	.5	.0	.3	.0	.7	.0	.0	1.5	32	.0	.3	.0	.0	.0	4.1	130
WSW	.2	.2	.1	.0	.6	.0	.0	1.0	21	.0	.2	*	.0	.0	6.4	166
W	.1	*	.2	.0	.8	.0	*	1.1	24	.0	.3	.0	.0	.0	7.2	188
WNW	.1	.0	*	.0	.4	.0	.0	.6	12	.0	.1	.0	.0	.0	4.9	120
NW	.2	.0	.1	.0	.9	.1	*	1.4	30	.0	*	.0	.0	.0	5.0	139
NNW	*	.0	.1	*	.8	.0	.0	1.0	22	.0	.1	.0	*	*	5.1	138
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	*	1
CALM	*	.0	.0	.0	.0	.0	.0	*	1	.0	.1	.0	.0	.0	.6	16
TOT OBS	116	13	75	1	209	7	4	*	401	1	100	9	2	2	1666	2179
TOT PCT	5.3	.6	3.4	*	9.6	.3	.2	18.4		*	4.6	.4	.1	.1	76.5	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW	OTHER FRZN PCPN					FOG WD PCPN	SMOKE	DUST BLWG	DUST SNOW	SIG WEA	
00003	3.4	.2	2.6	.0	9.2	.2	.2	15.0	88	.0	5.8	.5	.2	.2	78.5	586
06009	5.6	1.0	4.6	.0	10.1	.0	.0	19.5	101	.0	3.5	.6	.2	.2	76.2	517
12015	5.7	.7	2.2	.2	8.8	.4	.5	17.4	95	.2	3.1	.0	.0	.0	79.3	547
18021	6.6	.6	4.6	.0	10.5	.7	.0	22.1	120	.0	5.7	.6	.0	.0	71.7	544
TOT	116	13	76	1	211	7	4		404	1	100	9	2	2	1678	2194
PCT	5.3	.6	3.5	*	9.6	.3	.2	18.4		*	4.6	.4	.1	.1	76.5	100.0

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PERIOD: (PRIMARY) 1942-1970  
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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)						48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	00					03	06	09	12	15	18	21	
N	.4	1.9	3.5	2.2	.3	.0	216	8.2	17.0	8.4	4.8	9.0	5.9	9.0	8.0	7.5	9.6	
NNE	.2	1.1	1.3	.9	.1	.0	94	3.6	16.6	3.6	1.9	3.6	4.2	4.1	3.6	3.3	3.5	
NNE	.4	1.7	2.1	1.4	.2	.0	152	5.8	16.0	5.8	7.6	6.6	2.5	4.3	4.3	7.4	4.3	
ENE	.1	1.2	2.0	1.1	.9	.0	140	5.3	20.2	4.8	10.5	4.7	5.0	6.4	2.9	5.9	2.6	
E	.3	1.4	2.0	1.3	.3	*	139	5.3	17.6	5.3	2.9	5.6	5.0	5.1	2.2	6.6	4.3	
ESE	.2	.8	1.8	.9	.4	.0	106	4.0	18.2	3.8	4.8	3.8	5.0	4.1	2.9	4.2	5.2	
SE	.6	1.6	2.7	2.1	.2	.1	193	7.3	17.3	7.8	7.6	7.3	9.2	6.8	10.1	6.1	7.8	
SSE	.2	1.6	2.7	1.1	.2	.0	152	5.8	16.4	3.1	6.7	4.1	11.8	6.8	12.3	5.1	11.3	
S	.2	2.0	3.0	2.1	.3	.0	200	7.6	17.0	8.1	10.5	8.8	5.0	8.1	8.7	5.7	5.2	
SSW	.2	1.1	1.9	1.3	.2	.1	125	4.8	18.2	6.4	.0	4.3	8.4	5.1	3.6	3.5	4.3	
SW	.4	1.9	1.9	2.0	.6	.0	177	6.7	17.9	5.8	4.8	8.4	5.9	5.3	8.0	7.9	5.2	
WSW	.1	1.6	2.5	2.2	.6	.1	189	7.2	20.1	7.4	10.5	6.6	9.2	6.8	8.0	6.1	9.6	
W	.4	3.0	2.9	2.2	.7	.2	245	9.3	17.5	10.6	8.6	8.4	9.2	8.7	8.0	9.4	11.3	
WNW	.1	1.5	2.5	1.1	.3	.0	144	5.5	16.3	5.6	7.6	5.3	5.9	5.1	5.1	5.5	5.2	
NW	.3	1.6	2.5	1.1	.8	*	166	6.3	17.8	5.3	4.8	6.9	5.0	6.4	8.0	7.4	4.3	
NNW	*	1.5	2.5	1.6	.6	.1	165	6.3	19.3	7.3	5.7	5.8	2.5	6.4	4.3	7.0	6.1	
VAR	*	.0	.0	.0	.0	.0	1	*	1.0	.0	.0	.0	.0	.2	.0	.0	.0	
CALM	1.0	665	995	641	178	17	25	1.0	.0	1.0	1.0	.8	.0	1.3	.0	1.5	.0	
TOT OBS	133	25.3	37.8	24.4	6.8	.6	2629	100.0	17.5	606	105	533	119	469	138	544	115	
TOT PCT	5.1							100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)								
	0-6	7-16	17-27	28-40	41+				00	03	06	09	12	15	18	21	
N	1.7	4.5	3.9	1.7	*	310	11.8	16.9	12.0	6.7	12.6	10.1	13.0	11.6	10.8	13.0	
NE	1.6	4.0	3.5	1.5	.5	292	11.1	18.0	10.6	18.1	11.3	7.6	10.7	7.2	13.2	7.0	
E	1.2	3.8	2.7	1.6	.1	245	9.3	17.8	9.1	7.6	9.4	10.1	9.2	5.1	10.8	9.6	
SE	1.9	4.8	4.3	1.9	.2	345	13.1	16.9	10.9	14.3	11.4	21.0	13.6	22.5	11.2	19.1	
S	1.4	4.5	4.5	1.8	.2	325	12.4	17.5	14.5	10.5	13.1	13.4	13.2	12.3	9.2	9.6	
SW	1.9	4.5	4.4	2.7	.5	366	13.9	19.0	13.2	15.2	15.0	15.1	12.2	15.9	14.0	14.8	
W	2.3	6.2	3.6	2.4	.3	389	14.8	17.0	16.2	16.2	13.7	15.1	13.9	13.0	14.9	16.5	
NW	1.3	4.9	3.9	2.1	.4	331	12.6	18.6	12.5	10.5	12.8	7.6	12.8	12.3	14.3	10.4	
VAR	*	.0	.0	.0	.0	1	*	1.0	.0	.0	.0	.0	.2	.0	.0	.0	
CALM	1.0	976	809	409	58	25	1.0	.0	1.0	1.0	.8	.0	1.3	.0	1.5	.0	
TOT OBS	377	37.1	30.8	15.6	2.2	2629	100.0	17.5	606	105	533	119	469	138	544	115	
TOT PCT	14.3						100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

PERIOD: (PRIMARY) 1942-1970  
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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	WIND SPEED (KNOTS)					PCT		TOTAL DBS
	1-3	4-10	11-21	22-33	34-47	48+	MEAN	
00003	4.4	24.2	35.7	26.0	8.0	.7	18.0	711
06009	4.0	26.4	39.0	24.2	6.4	.3	17.3	652
12015	2.3	24.3	41.9	23.8	5.6	1.2	17.8	606
18021	5.5	26.4	36.3	23.4	6.8	.5	17.1	659
TOT	107	665	995	641	178	17	17.5	2628
PCT	4.1	25.3	37.9	24.4	6.8	.6	100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

BY WIND DIRECTION

WIND DIR	PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)							TOTAL OBS	MEAN CLOUD COVER
	0-2	3-4	5-7	8	9	10	11		
N	1.4	.5	2.7	4.9	163	6.2			
NNE	.8	.2	.9	1.9	64	5.8			
NE	.9	.4	.8	3.4	92	6.3			
ENE	1.1	.1	1.5	3.0	96	6.1			
E	.6	.2	1.9	3.0	99	6.4			
ESE	.2	.1	1.2	2.5	67	7.1			
SE	.3	.5	1.5	4.9	122	7.1			
SSE	.4	.7	.9	4.3	107	6.9			
S	.6	.4	1.6	4.5	121	6.9			
SSW	.2	.4	1.1	2.5	71	6.8			
SW	.3	.7	1.1	3.2	84	6.9			
WSW	.4	.4	1.1	3.3	127	6.5			
W	.9	.8	2.9	3.4	137	6.1			
WNW	.6	.8	2.8	2.2	108	5.9			
NW	.6	.5	2.7	2.8	113	6.2			
NNW	.6	.5	2.6	3.1	120	6.5			
VAR	.1	.3	.0	.0	1	.0			
CALM	.2	.2	.2	.2	15	4.7			
TOT OBS	172	128	501	906	1707	6.5			
TOT PCT	10.1	7.5	29.3	53.1	100.0				

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)												TOTAL DBS
	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8	ANY HGT	
N	.4	.1	.2	2.2	2.3	1.5	.4	.2	.0	.1	2.3	.1	163
NNE	.2	.0	.1	.8	1.1	.3	.2	.0	.0	.0	.9	.0	64
NE	.4	.0	.2	.9	1.3	.7	.0	.0	.0	.0	1.8	.0	92
ENE	.6	.1	.1	.5	1.5	1.0	.0	.1	.0	.1	1.7	.1	96
E	.4	.0	.1	1.2	1.6	.9	.1	.0	.0	.1	1.5	.1	99
ESE	.4	.1	.4	.9	1.0	.4	.1	.1	.0	.1	.6	.1	67
SE	1.0	.0	.2	1.6	1.6	.8	.2	.1	.2	.0	1.4	.0	122
SSE	.5	.1	.2	1.0	2.0	1.1	.1	.0	.1	.0	1.3	.0	107
S	.9	.0	.2	.9	2.7	.8	.1	.0	.0	.0	1.5	.0	121
SSW	.4	.1	.1	1.0	.8	.6	.1	.0	.0	.0	1.1	.0	71
SW	.7	.1	.4	.8	1.2	.5	.2	.0	.0	.0	1.1	.0	84
WSW	.2	.0	.6	1.8	2.1	.5	.1	.1	.0	.0	2.0	.0	127
W	.4	.1	1.1	2.2	1.3	1.1	.2	.1	.0	.0	2.6	.0	137
WNW	.3	.0	.2	.8	1.9	1.0	.0	.1	.0	.0	2.1	.0	108
NW	.5	.1	.2	1.4	1.8	1.0	.0	.0	.0	.0	1.6	.0	113
NNW	.4	.0	.2	1.9	1.8	.6	.4	.1	.0	.0	1.5	.0	120
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	1
CALM	.1	.0	.0	.2	.1	.0	.0	.0	.0	.0	.5	.0	15
TOT OBS	129	10	62	344	442	223	34	14	4	8	437	.0	1707
TOT PCT	7.6	.6	3.6	20.2	25.9	13.1	2.0	.8	.2	.5	25.6	.0	100.0



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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	1.5	.7	.7	.7	.7	.7	.7	.7
= OR >5000	1.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
= OR >3500	2.3	3.5	3.5	3.5	3.5	3.5	3.5	3.5
= OR >2000	10.9	15.4	16.3	16.6	16.6	16.6	16.6	16.6
= OR >1000	22.9	37.0	40.9	42.1	42.4	42.6	42.6	42.6
= OR >600	23.0	50.9	59.9	62.1	62.4	62.7	62.7	62.7
= OR >300	28.4	53.0	62.9	65.4	65.9	66.4	66.4	66.4
= OR >150	28.5	53.2	63.4	65.9	66.5	66.9	66.9	66.9
= OR > 0	29.9	54.4	65.8	69.3	70.9	72.8	74.4	74.4
TOTAL	494	930	1124	1185	1211	1245	1272	1272

TOTAL NUMBER OF OBS: 1709

PCT FREQ NH <5/8: 25.6

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

TOTAL								
0	1	2	3	4	5	6	7	8 OBSCD OBS
4.1	3.1	6.4	5.4	6.2	7.6	11.4	11.5	37.1
								7.2
								1766

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.1	*	*	*	.1	.1	.1	.0	*	.0	.1	.0	.1	.0	*	.1	.0	.0	21	1.0
NO PCP	*	.0	.1	.1	.1	.3	.3	.0	.3	.2	.2	.1	.1	*	*	.1	.0	.1	49	2.3
TOTAL	4	1	4	3	5	8	10	0	8	4	6	3	5	1	2	4	0	2	70	3.2
PCP	*	.1	*	.4	.1	.1	.1	.1	.2	*	.0	*	.1	.1	.1	.0	.0	.0	34	1.6
NO PCP	.1	.0	*	.1	*	.1	.2	.3	.3	.0	.0	.0	.1	.0	.0	.0	.0	.0	27	1.2
TOTAL	3	3	2	10	3	5	6	9	10	1	0	1	4	2	2	0	0	0	61	2.8
PCP	.2	*	.1	.1	*	.2	.2	.2	.1	*	.3	*	.1	*	.2	.1	.0	.0	45	2.1
NO PCP	.1	.0	.1	*	.1	.1	.1	.1	.4	.2	.3	.5	.2	*	.0	.1	.0	.0	55	2.5
TOTAL	7	1	5	3	3	7	7	7	11	5	13	11	8	2	4	6	0	0	100	4.6
PCP	.6	.1	.4	.3	.2	.3	.6	.2	.6	.3	.4	.2	.2	.1	.4	.2	.0	.0	113	5.2
NO PCP	.8	.2	.3	.2	.2	.4	.4	.6	.6	.5	.7	.3	.4	.3	.4	.6	.0	.1	149	6.9
TOTAL	30	7	16	11	9	15	21	17	24	17	24	11	14	9	17	18	0	2	262	12.1
PCP	.2	.3	.6	.4	.4	.3	.5	.5	.6	.1	.5	.3	.5	.2	.6	.5	.0	*	143	6.6
NO PCP	2.1	1.0	1.2	1.2	1.3	1.1	2.2	1.3	1.9	1.8	1.8	3.1	2.4	1.6	1.9	2.3	.0	.3	615	28.4
TOTAL	51	27	38	35	38	30	57	38	54	41	49	78	62	39	54	60	0	7	758	34.9
PCP	.3	.1	.1	.1	.1	.0	.2	.1	.1	.2	.2	.1	.1	.1	.1	.1	.0	.0	44	2.0
NO PCP	3.7	1.7	2.4	2.9	2.8	1.2	2.5	2.6	2.4	1.4	1.5	2.7	4.3	3.0	2.7	2.3	*	.2	874	40.3
TOTAL	86	40	55	65	62	27	58	59	53	34	37	62	95	67	60	52	1	5	918	42.3
TOTAL	181	79	120	127	120	92	159	130	160	102	129	166	188	120	139	140	1	16	2169	100.0
PCT	8.3	3.6	5.5	5.9	5.5	4.2	7.3	6.0	7.4	4.7	5.9	7.7	8.7	5.5	6.4	6.5	*	.7	100.0	

MARCH

PERIOD: (PRIMARY) 1942-1970  
(OVER-ALL) 1901-1970

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	5	.2
	4-10	.0	.0	.1	.0	.1	.1	.1	.0	.1	.0	.0	.1	.1	.1	.0	.0	.0	.0	16	.6
	11-21	.0	.0	.1	.0	.2	.2	.2	.1	.2	.0	.0	.0	.1	.0	.1	.1	.0	.0	20	1.2
	22+	.2	.0	.0	.0	.0	.0	.1	.0	.0	.1	.1	.1	.1	.0	.0	.1	.0	.0	22	.8
	TOTAL	4	1	4	3	5	9	11	0	8	4	7	3	5	1	2	4	0	2	73	2.8
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	15	.6
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	26	1.0
	22+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	29	1.1
	TOTAL	3	5	2	10	4	5	7	1	11	1	1	1	4	2	4	1	0	0	70	2.7
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	14	.5
	11-21	.1	.0	.1	.0	.1	.1	.1	.0	.1	.0	.1	.1	.2	.1	.1	.1	.0	.0	38	1.5
	22+	.2	.0	.1	.1	.1	.2	.2	.1	.3	.2	.2	.3	.1	.1	.1	.1	.0	.0	58	2.2
	TOTAL	8	1	5	3	3	8	10	1	11	6	14	11	9	3	4	7	0	0	110	4.2
2<5	0-3	.0	.0	.0	.0	.0	.1	.1	.1	.1	.2	.2	.0	.1	.1	.0	.0	.0	.1	15	.6
	4-10	.2	.1	.1	.0	.1	.1	.1	.2	.1	.2	.2	.0	.2	.1	.1	.2	.0	.0	45	1.7
	11-21	.6	.1	.2	.2	.2	.2	.5	.5	.5	.2	.4	.2	.2	.2	.5	.2	.0	.0	125	4.8
	22+	.4	.1	.3	.3	.2	.3	.5	.5	.4	.3	.5	.3	.3	.2	.3	.3	.0	.0	126	4.8
	TOTAL	31	9	16	11	12	19	29	23	27	19	31	12	19	11	21	19	0	2	311	12.0
5<10	0-3	.2	.0	.1	.0	.1	.0	.3	.0	.1	.1	.2	.0	.1	.0	.1	.1	.0	.3	36	1.4
	4-10	.4	.2	.3	.2	.3	.2	.3	.4	.5	.3	.7	.4	1.3	.5	.5	.4	.0	.0	180	6.9
	11-21	1.0	.5	.7	.6	.5	.7	1.2	.9	.9	.7	.5	1.2	.6	.9	.9	1.2	.0	.0	340	13.1
	22+	.8	.5	.6	.7	.7	.4	.8	.4	1.0	.6	1.2	1.8	1.3	.4	.7	1.0	.0	.0	340	13.1
	TOTAL	62	30	45	38	42	33	67	45	64	45	69	87	82	17	62	68	0	9	896	34.4
10+	0-3	.2	.1	.3	.1	.2	.1	.1	.1	.2	.1	.1	.1	.3	.1	.2	.0	.1	.5	70	2.7
	4-10	1.3	.7	1.2	1.0	.9	.3	1.0	.9	1.1	.6	.9	1.0	1.5	.9	.9	.9	.0	.0	394	15.1
	11-21	1.7	.7	.9	1.2	1.1	.5	.8	1.0	1.0	.7	.6	1.1	1.8	1.3	1.0	1.0	.0	.0	423	16.3
	22+	.9	.3	.6	.6	.5	.3	.7	.5	.6	.5	.4	.6	1.2	.8	.7	.7	.0	.0	255	9.8
	TOTAL	106	46	78	73	72	32	66	65	74	48	53	75	124	80	72	65	1	12	1142	43.9
	TOTAL	214	106	150	138	138	106	190	149	195	123	175	189	244	144	165	164	1	25	2602	100.0
	PCT	8.2	3.5	5.8	5.3	5.3	4.1	7.3	5.7	7.5	4.7	6.7	7.3	9.4	5.5	6.3	6.3	*	1.0	100.0	

TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8), AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000	150	300	600	1000	2000	3500	5000	6500	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
	149	299	599	999	1999	3499	4999	6499	7999				
00003	5.9	.4	3.9	19.2	25.1	15.5	2.8	1.1	.4	.2	74.5	25.5	459
06009	6.5	1.2	4.3	21.4	24.1	13.0	2.4	1.7	.2	.7	75.7	24.3	415
12015	11.0	.2	3.3	18.4	25.1	13.1	.2	.5	.0	.5	72.3	27.7	419
18021	7.2	.5	2.8	21.3	29.2	10.3	2.3	.0	.2	.5	74.3	25.7	428
TOT	131	10	62	345	445	224	34	14	4	8	1277	444	1721
PCT	7.6	.6	3.6	20.0	25.9	13.0	2.0	.8	.2	.5	74.2	25.8	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	3.9	1.3	2.4	10.3	27.3	54.8	458
06009	2.9	1.2	3.9	14.0	27.6	50.4	413
12015	3.4	1.7	3.6	14.0	31.4	45.9	414
18021	4.2	1.9	5.0	10.8	33.0	45.0	424
TOT	62	26	63	209	509	840	1709
PCT	3.6	1.5	3.7	12.2	29.8	49.2	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET, NH >4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND5+	NH <5/8 AND 5+	TOTAL OBS
00003	6.1	11.6	35.2	40.6	24.2	458
06009	6.5	12.6	40.4	36.8	22.8	413
12015	11.1	14.5	39.6	33.8	26.6	414
18021	7.1	11.1	38.9	36.6	24.5	424
TOT PCT	131 7.7	212 12.4	657 39.4	633 37.0	419 24.5	1709 100.0

MARCH

PERIOD: (PRIMARY) 1942-1970  
(OVER-ALL) 1901-1970

AREA 0008 DUTCH HARBOR  
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TABLE 13

TEMP F	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP										TOTAL OBS	PCT FREQ
	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100				
50/54	.0	.0	.0	.0	.1	.1	.1	.0			4	.2
45/49	.0	.0	.1	.1	.2	.7	.6	.7			41	2.5
40/44	.0	.1	.0	.6	1.5	2.7	6.0	6.8			284	17.7
35/39	.0	.0	.2	1.0	3.3	8.1	19.1	22.4			871	54.1
30/34	.0	.0	.0	.4	1.1	2.2	6.9	8.4			305	19.0
25/29	.0	.0	.0	.1	.2	.7	1.9	2.6			90	5.6
20/24	.0	.0	.0	.0	.1	.2	.1	.5			14	.9
TOTAL	0	1	6	34	104	239	558	667			1609	100.0
PCT	.0	.1	.4	2.1	6.5	14.9	34.7	41.5				

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP										VAR	CALM
N	NE	E	SE	S	SW	W	NW				
.0	.0	.0	.1	.1	.0	.1	.0			.0	.0
.2	.2	.2	.3	.6	.6	.3	.1			.0	.1
.6	1.2	1.9	2.0	3.5	3.7	3.0	1.4			.0	.4
3.0	4.8	6.2	9.1	7.9	9.5	4.3	4.7			.0	.5
3.9	3.1	1.8	1.1	.3	1.8	3.2	3.7			.0	.1
1.6	1.0	.2	.1	.1	.2	.6	1.9			.0	.0
.3	.3	.1	.1	.0	.0	.0	.1			.0	.0
154	173	166	207	200	254	248	190			0	17
9.6	10.8	10.3	12.9	12.4	15.8	15.4	11.8			.0	1.1

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR										TOTAL OBS
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN		
00003	50	47	44	38	28	23	18	37.2		707
06009	50	45	43	37	26	23	18	36.2		653
12015	45	43	41	36	27	21	19	35.3		604
18021	51	45	42	36	27	23	20	35.6		658
TOT	51	45	43	37	27	23	18	36.1		2622

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR										TOTAL OBS
HOUR (GMT)	0-29	30-59	60-69	70-79	80-89	90-100	MEAN			
00003	.0	3.4	8.1	19.2	35.0	34.3	83			443
06009	.0	2.4	5.6	13.2	31.5	47.2	86			409
12015	.0	1.2	5.8	13.8	36.9	42.4	86			347
18021	.0	2.9	6.0	13.0	35.3	42.8	86			416
TOT	0	41	104	241	555	670	85			1615

PERIOD: (PRIMARY) 1942-1970  
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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	17	21	25	29	33	37	41	45	49	TOT	W FOG	WD FOG
11/13	.0	.0	.0	.0	.0	.0	.0	.1	.1	3	.0	.2
9/10	.0	.0	.0	.0	.0	.0	.2	.2	.1	7	.0	.4
7/8	.0	.0	.0	.0	.0	.0	.5	.4	.1	17	.1	.8
6	.0	.0	.0	.0	.0	.1	.5	.2	.0	13	.0	.7
5	.0	.0	.0	.0	.1	.6	1.2	.7	.0	48	.5	2.0
4	.0	.0	.0	.0	.1	1.1	2.2	.0	.0	67	.3	3.1
3	.0	.0	.0	.0	.3	2.1	1.5	.0	.0	72	.2	3.5
2	.0	.0	.0	.0	.4	4.5	1.7	.1	.0	129	.5	6.1
1	.0	.0	.0	.0	.4	6.6	.7	.0	.0	151	.4	7.3
0	.0	.0	.0	.0	2.6	8.9	1.1	.2	.0	252	1.0	11.8
-1	.0	.0	.0	.1	4.6	5.5	.2	.1	.0	204	.5	9.9
-2	.0	.0	.0	.3	6.0	4.9	.4	.0	.0	228	.5	11.1
-3	.0	.0	.0	.6	5.4	1.6	.1	.0	.0	150	.3	7.4
-4	.0	.0	.2	1.2	5.0	1.4	.1	.0	.0	154	.1	7.8
-5	.0	.0	.3	2.0	3.2	.8	.0	.0	.0	123	.3	5.9
-6	.0	.0	.1	2.5	1.2	.3	.0	.0	.0	80	.2	3.9
-7/-8	.0	.0	1.4	3.1	1.4	.6	.0	.0	.0	128	.1	6.4
-9/-10	.0	.0	1.8	.9	.6	.2	.0	.0	.0	69	.1	3.4
-11/-13	.1	.4	1.1	.5	.4	.1	.0	.0	.0	46	.1	2.3
-14/-16	.1	.6	.3	.0	.1	.0	.0	.0	.0	21	.0	1.1
-17/-19	.2	.1	.0	.1	.0	.0	.0	.0	.0	6	.0	.3
-20/-22	.1	.1	.0	.0	.0	.0	.0	.0	.0	2	.0	.1
TOTAL	.6	.22	101	219	616	769	201	33	3	1970	93	1877
PCT	.3	1.1	5.1	11.1	31.3	39.0	10.2	1.7	.2	100.0	4.7	95.3

PERIOD: (PRIMARY) 1963-1970 MARCH  
(OVER-ALL) 1963-1970

TABLE 18

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.2	.7	.0	.0	.0	.0	10	.0	.3	.0	.0	.0	.0	4
1-2	.3	1.4	2.1	.0	.0	.0	44	.0	1.5	1.6	.0	.0	.0	36
3-4	.1	1.2	1.5	.6	.0	.0	39	.1	.7	1.3	.3	.0	.0	28
5-6	.0	.3	1.0	.3	.0	.0	20	.0	.2	.8	.2	.1	.0	14
7	.0	.1	.6	1.0	.1	.0	20	.1	.1	.2	.8	.0	.0	13
8-9	.0	.0	.3	.6	.1	.0	12	.0	.0	.3	.9	.2	.0	15
10-11	.0	.0	.1	.3	.0	.0	5	.0	.0	.1	.2	.2	.0	5
12	.0	.0	.1	.3	.0	.0	5	.0	.0	.0	.0	.3	.0	3
13-16	.0	.0	.0	.0	.2	.0	2	.0	.0	.0	.1	.2	.0	3
17-19	.0	.0	.0	.0	.1	.0	1	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.1	.0	1
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	7	43	66	37	5	0	158	2	32	49	28	11	0	122
PCT	.6	3.7	5.7	3.2	.4	.0	13.7	.2	2.8	4.2	2.4	1.0	.0	10.6

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.3	1.0	.0	.0	.0	.0	15	.1	.5	.0	.0	.0	.0	7
1-2	.2	.5	1.4	.0	.0	.0	24	.3	.8	1.6	.0	.0	.0	31
3-4	.0	.4	.3	.1	.0	.0	10	.0	1.1	1.2	.5	.0	.0	33
5-6	.0	.1	1.7	.3	.0	.0	30	.0	.7	1.5	.5	.1	.0	32
7	.0	.1	.2	.3	.1	.1	8	.0	.5	1.3	.8	.0	.0	30
8-9	.0	.0	.3	.8	.1	.0	13	.0	.0	.3	.9	.1	.0	14
10-11	.0	.0	.0	.4	.0	.0	9	.0	.0	.1	.6	.5	.0	14
12	.0	.0	.0	.2	.2	.0	4	.0	.0	.2	.2	.0	.0	4
13-16	.0	.0	.0	.0	.6	.0	7	.0	.0	.1	.0	.0	.0	1
17-19	.0	.0	.0	.0	.1	.0	1	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.1	.0	.0	1
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	6	24	49	29	12	1	121	4	42	72	41	8	0	167
PCT	.5	2.1	4.2	2.5	1.0	.1	10.5	.3	3.6	6.2	3.5	.7	.0	14.4

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1970

MARCH

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)														
HGT	S													
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.1	.2	.0	.0	.0	.0	3	.0	.4	.0	.0	.0	.0	5
1-2	.0	1.4	1.0	.0	.0	.0	27	.0	1.0	.9	.0	.0	.0	21
3-4	.0	.4	1.0	.4	.0	.0	21	.0	.3	.3	.2	.0	.0	10
5-6	.0	.3	1.6	.5	.0	.0	28	.0	.4	1.5	.5	.0	.0	28
7	.0	.3	.9	1.7	.0	.0	33	.0	.1	1.3	1.3	.0	.0	31
8-9	.0	.0	.3	.3	.1	.0	7	.0	.0	.6	.7	.2	.0	17
10-11	.0	.0	.3	.8	.2	.0	14	.0	.0	.0	1.0	.2	.0	17
12	.0	.0	.0	.2	.0	.0	2	.0	.1	.1	.3	.1	.0	13
13-16	.0	.0	.1	.3	.2	.0	6	.0	.0	.1	.9	.4	.0	16
17-19	.0	.0	.0	.1	.0	.0	1	.0	.0	.0	.1	.1	.0	2
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.1	.0	.0	1
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.1	.0	1
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.1	.0	1
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.1	.4	.0	6
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	1	30	57	49	5	0	142	0	27	55	59	17	0	159
PCT	.1	2.6	4.9	4.2	.4	.0	12.3	.0	2.3	4.8	5.1	1.5	.0	13.7

HGT	W													TOTAL	GRAND TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	1-3	4-10	11-21	22-33	34-47	48+			
<1	.0	1.0	.0	.0	.0	.0	.1	.5	.0	.0	.0	.0	.0	7	62
1-2	.1	1.6	.7	.0	.0	.0	.1	1.6	1.3	.0	.0	.0	.0	35	245
3-4	.0	.9	1.4	.4	.0	.0	.1	1.1	1.2	.3	.0	.0	.0	31	203
5-6	.1	.4	1.2	.3	.0	.0	.0	.3	1.4	.4	.0	.0	.0	24	199
7	.0	.1	.8	.3	.1	.0	.0	.1	.4	.3	.1	.0	.0	10	160
8-9	.0	.0	.8	.6	.0	.0	.0	.1	.3	.7	.4	.0	.0	18	112
10-11	.0	.0	.3	.3	.2	.1	.0	.1	.3	.3	.3	.0	.0	11	81
12	.0	.1	.0	.2	.1	.1	.0	.0	.0	.2	.1	.0	.0	3	33
13-16	.0	.0	.0	.3	.1	.0	.0	.0	.0	.0	.3	.0	.0	5	44
17-19	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	6
20-22	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	0	2
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	2
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	7
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
TOTAL	2	46	59	29	6	2	3	44	58	26	13	0	0	144	1156
PCT	.2	4.0	5.1	2.5	.5	.2	.3	3.8	5.0	2.2	1.1	.0	.0	12.5	100.0



PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1970

MARCH

AREA 0008 DUTCH HARBOR  
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TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL DBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	1.4	4.5	.0	.0	.0	.0					69
1-2	1.0	9.6	10.5	.0	.0	.0					246
3-4	.3	6.2	8.1	2.8	.0	.0					204
5-6	.2	2.7	10.5	3.5	.2	.0					200
7	.1	1.3	5.6	6.3	.3	.1					160
8-9	.0	.1	3.1	5.3	1.1	.0					112
10-11	.0	.1	1.5	3.9	1.5	.1					81
12	.0	.2	.3	1.5	.7	.1					33
13-16	.0	.0	.3	1.6	1.9	.0					44
17-19	.0	.0	.0	.3	.3	.0					6
20-22	.0	.0	.0	.1	.1	.0					2
23-25	.0	.0	.0	.1	.1	.0					2
26-32	.0	.0	.0	.1	.5	.0					7
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	35	288	465	298	77	3					1166
PCT	3.0	24.7	39.9	25.6	6.6	.3					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.2	7.0	7.8	4.7	2.2	2.0	.9	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	322	4
6-7	.0	1.1	6.4	10.8	6.6	3.3	2.4	1.3	1.3	.4	.1	.1	.0	.0	.0	.0	.0	.0	.0	428	6
8-9	.0	.4	2.4	3.3	5.4	4.6	2.6	1.1	1.8	.1	.0	.0	.1	.0	.0	.0	.0	.0	.0	275	7
10-11	.0	.3	.9	.7	1.0	2.6	1.6	1.1	.9	.2	.1	.2	.1	.0	.0	.0	.0	.0	.0	122	8
12-13	.0	.0	.0	.1	.2	.2	.6	.2	.6	.0	.1	.2	.4	.0	.0	.0	.0	.0	.0	32	14
>13	.0	.0	.0	.0	.6	.0	.1	.1	.6	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	17	11
INDET	5.3	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	68	0
TOTAL	70	111	221	249	201	161	103	56	67	9	4	5	7	0	0	0	0	0	0	1264	6
PCT	5.5	8.8	17.5	19.7	15.9	12.7	8.1	4.4	5.3	.7	.3	.4	.6	.0	.0	.0	.0	.0	.0	100.0	

APRIL

PERIOD: (PRIMARY) 1945-1970  
(OVER-ALL) 1901-1970

AREA 0008 DUTCH HARBOR  
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TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW	OTHER FRZN PCPN					FOG	SMOKE	HAZE	BLWG	DUST	
N	.1	.0	.2	.0	.7	.0	.0	1.0	24	.0	.1	.0	*	.0	4.9	139
NNE	*	*	.1	.0	.2	.0	.0	.4	9	.0	.0	.0	.0	.0	2.4	64
NE	.2	.1	.2	.0	.3	.0	.0	.7	17	.0	.1	.0	.0	.0	2.3	71
ENE	.1	.0	.3	.0	.2	.0	.0	.6	14	.0	*	.0	*	.0	1.6	52
E	.5	.1	.3	*	.4	.0	.0	1.2	27	.0	.2	.0	.0	.0	2.4	88
ESE	.5	*	.2	.0	.1	.0	.0	.8	19	.0	.2	.0	.0	.0	2.3	78
SE	1.0	.0	1.0	.0	.3	.0	.0	2.3	53	.0	.4	.0	.0	.0	3.0	131
SSE	1.1	*	.6	.0	.3	.0	.0	1.9	43	.0	.4	.0	.0	.0	4.3	152
S	1.0	.0	.7	.0	.2	.0	.0	1.9	43	.0	.7	.1	.0	.0	5.4	186
SSW	.7	.2	.5	.0	.1	.0	.0	1.4	32	.0	.3	.1	.0	.0	3.8	129
SW	.7	.3	.5	.0	.1	.0	*	1.6	38	.0	.1	*	.0	.0	6.6	192
WSW	.6	.2	.5	.0	.5	.0	.1	2.0	45	.0	.2	.1	.0	.0	7.4	223
W	.5	.2	.4	.0	.7	.0	.2	2.0	45	.0	.1	.1	.0	.0	11.2	309
WNW	.3	*	.3	.0	.9	*	.0	1.5	34	.0	*	.0	.0	.0	5.2	154
NW	.2	.1	.2	.0	1.1	.0	.1	1.6	37	.0	.1	.0	.0	.0	5.9	175
NNW	*	.1	.1	.0	.9	.0	.0	1.0	24	.0	.1	.1	.0	.0	4.8	139
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
CALM	.0	.0	.0	.0	*	.0	.0	*	1	.0	*	.0	.0	.0	.9	23
TOT OBS	174	33	140	1	166	1	13	*	505	0	72	13	2	1713	2305	
TOT PCT	7.5	1.4	6.1	*	7.2	*	.6	21.9	.0	.0	3.1	.6	.1	74.3	100.0	

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE				HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW	UTHER FRZN PCPN	FOG WD PCPN					SMOKE HAZE	DUST BLWG	NO SIC	WEA SNOW		
00003	5.5	1.9	5.2	.0	6.8	.0	.6	19.5	.0	120	.0	4.2	.6	.0	75.6	616	
06009	7.8	1.2	6.6	.2	6.1	.0	.5	20.7	.0	122	.0	3.7	.8	.0	74.7	589	
12015	10.9	1.2	5.4	.0	6.8	.0	.5	24.2	.0	138	.0	2.5	.4	.0	73.0	571	
18021	6.5	1.3	6.8	.0	8.8	.2	.5	23.2	.0	129	.0	2.5	.4	.4	73.5	555	
TOT	178	33	140	1	166	1	13	509	0	76	13	76	13	2	1731	2331	
PCT	7.6	1.4	6.0	*	7.1	*	.6	21.8	.0	3.3	.6	3.3	.6	.1	74.3	100.0	

APRIL

PERIOD: (PRIMARY) 1945-1970  
(OVER-ALL) 1901-1970

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-3	4-10	11-21	22-33	34-47	48+	TOTAL OBS	PCT FREQ	MEAN SPD		00	03	06	09	12
N	.5	2.1	2.7	.8	.2	.0	173	6.2	14.4		5.9	6.1	7.7	3.5	6.8
NNE	.1	.8	1.2	.5	.3	.0	79	2.8	17.8		3.3	2.6	3.5	5.3	2.0
NE	.3	.9	1.4	.6	.1	.0	93	3.4	14.9		5.1	.9	4.4	2.6	1.8
ENE	.1	.8	.9	.5	.0	*	67	2.4	15.4		2.8	2.6	1.9	1.8	2.4
E	.2	1.3	1.4	.9	.2	.0	110	4.0	16.3		3.8	3.5	4.9	1.8	3.4
ESE	.1	.5	1.3	1.0	.3	.0	90	3.2	20.4		2.2	1.8	3.7	4.4	3.8
SE	.4	1.2	2.2	1.4	.5	.0	158	5.7	18.3		6.5	2.6	4.6	7.9	7.0
SSE	.1	.9	2.3	2.5	.3	.0	173	6.2	21.1		7.4	9.6	5.5	7.9	5.0
S	.4	1.8	3.0	2.6	.3	.0	222	8.0	17.3		6.5	4.4	8.9	4.4	9.1
SSW	.1	1.2	2.2	1.7	.3	.0	154	5.6	18.6		7.0	13.2	7.7	10.5	9.1
SW	.2	1.5	3.5	2.8	.4	.0	232	8.4	19.0		10.4	8.8	8.3	13.2	9.5
WSW	.1	1.4	4.2	2.9	.8	.1	268	9.7	20.2		11.6	10.5	12.3	10.5	15.1
W	.4	2.6	6.1	3.5	.5	.1	363	13.1	18.3		6.0	12.3	5.6	7.9	6.6
WNW	.0	.9	2.8	2.0	.4	*	170	6.1	20.4		7.1	7.0	8.3	4.4	6.4
NW	.2	1.5	3.1	2.1	.4	.0	204	7.4	18.3		6.0	7.0	6.1	10.5	6.2
NNW	.4	1.7	2.8	1.0	.2	.0	171	6.2	15.5		.0	.0	.0	.0	.0
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0		1.9	.0	2.0	.9	1.0
CALM	1.7	586	1140	746	142	11	47	1.7	.0		632	114	587	114	497
TOT OBS	149	21.1	41.1	26.9	5.1	11	2774	100.0	17.8		100.0	100.0	100.0	100.0	100.0
TOT PCT	5.4					.4									

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD			00	03	06	09	12
N	1.5	3.9	2.6	1.1	.0	252	9.1	15.5			9.2	8.8	11.2	8.8	8.9
NE	1.1	2.1	2.0	.5	*	160	5.8	15.1			7.9	3.5	6.3	4.4	4.2
E	.8	2.6	2.3	1.3	.1	200	7.2	18.1			6.0	5.3	8.7	6.1	7.2
SE	1.3	3.0	4.7	2.6	.3	331	11.9	19.8			13.0	9.6	10.1	15.8	12.1
S	1.9	4.2	5.5	1.8	.1	376	13.6	17.8			13.9	14.0	13.3	7.0	13.7
SW	1.2	5.9	7.8	2.7	.4	500	18.0	19.6			17.4	21.9	16.0	23.7	18.5
W	1.3	6.8	8.0	2.7	.3	533	19.2	18.9			17.6	22.8	17.9	18.4	21.7
NW	1.5	5.1	5.1	1.7	*	375	13.5	17.0			13.1	14.0	14.5	14.9	12.7
VAR	.0	.0	.0	.0	.0	0	.0	.0			.0	.0	.0	.0	.0
CALM	1.7	935	1054	403	38	47	1.7	.0			1.9	.0	2.0	.9	1.0
TOT OBS	344	33.7	38.0	14.5	1.4	2774	100.0	17.8			632	114	587	114	497
TOT PCT	12.4										100.0	100.0	100.0	100.0	100.0

APRIL

PERIOD: (PRIMARY) 1945-1970  
(OVER-ALL) 1901-1970

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

WIND DIR	HOUR	WIND SPEED (KNOTS)								PCT		TOTAL OBS
		1-3	4-10	11-21	22-33	34-47	48+	CALM	MEAN	FREQ		
N	0003	3.6	24.4	37.5	26.8	5.4	.7	1.6	17.7	100.0		746
NNE	0609	4.1	20.0	41.8	26.7	5.3	.3	1.9	17.7	100.0		701
NE	1215	1.9	20.2	45.3	26.5	4.9	.3	.8	18.5	100.0		633
E	1821	4.9	19.6	40.3	27.5	4.9	.3	2.4	17.6	100.0		694
ESE	TOT	102	586	1140	746	142	11	47	17.8			2774
SE	PCT	3.7	21.1	41.1	26.9	5.1	.4	1.7		100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION								MEAN CLOUD COVER	TOTAL OBS
	0-2	3-4	5-7	8	9	10	11	12		
N	1.0	.8	2.4	2.0	120	5.6				
NNE	.4	.2	.7	1.4	51	6.3				
NE	.3	.4	.8	1.0	49	6.1				
ENE	.4	.2	.4	1.2	42	6.1				
E	.1	.2	.6	2.4	63	7.4				
ESE	.2	.1	.6	2.9	74	7.3				
SE	.2	.2	.9	4.3	107	7.4				
SSE	.2	.3	1.1	5.3	132	7.4				
S	.3	.4	1.8	6.3	168	7.3				
SSW	.3	.3	1.9	3.5	114	6.9				
SW	.4	1.1	2.3	4.4	158	6.5				
WSW	.5	2.0	3.0	3.8	178	6.1				
W	1.1	1.9	5.9	5.0	269	6.2				
WNW	.5	.5	3.3	2.7	134	6.3				
NW	.6	1.1	2.7	3.1	144	6.2				
NNW	.5	.5	2.0	2.7	110	6.5				
VAR	.0	.0	.0	.0	0	.0				
CALM	.1	.2	.4	.4	21	5.6				
TOT OBS	128	197	595	1014	1934	6.6				
TOT PCT	6.6	10.2	30.8	52.4	100.0					

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION												TOTAL OBS
	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8 ANY HGT		
N	.3	.0	.1	1.0	2.0	.3	.3	.0	.1	.0	2.2		120
NNE	.0	.0	.0	.5	1.2	.3	.0	.0	.0	.0	.6		51
NE	.1	.1	.1	.3	.8	.2	.1	.1	.0	.0	.9		49
ENE	.2	.1	.1	.4	.6	.1	.1	.0	.0	.0	.7		42
E	.2	.0	.1	1.0	.9	.4	.1	.0	.1	.0	.5		63
ESE	.2	.1	.4	.7	1.4	.4	.2	.0	.0	.0	.4		74
SE	1.0	.1	.3	1.6	1.2	.4	.1	.1	.0	.0	.7		107
SSE	.9	.1	.7	1.8	1.4	.6	.3	.0	.0	.1	1.0		132
S	.9	.1	.7	2.3	2.4	.8	.4	.0	.0	.0	1.2		168
SSW	.5	.1	.2	1.0	1.7	1.1	.2	.0	.0	.0	1.1		114
SW	.2	.1	.2	1.5	2.2	1.6	.2	.1	.0	.0	2.2		158
WSW	.4	.1	.4	1.1	2.4	1.6	.1	.1	.0	.0	3.2		178
W	.4	.1	.1	2.7	4.2	1.6	.3	.2	.1	.1	4.3		269
WNW	.2	.1	.2	1.6	2.2	.7	.3	.0	.0	.0	1.8		134
NW	.1	.1	.3	1.4	2.4	.6	.3	.0	.1	.0	2.2		144
NNW	.2	.0	.2	.9	2.5	.5	.2	.0	.0	.0	1.3		110
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0		0
CALM	.1	.0	.0	.1	.2	.2	.1	.0	.0	.0	.5		21
TOT OBS	111	17	74	389	576	216	57	8	5	2	479		1934
TOT PCT	5.7	.9	3.8	20.1	29.8	11.2	2.9	.4	.3	.1	24.8		100.0

PERIOD: (PRIMARY) 1945-1970  
(OVER-ALL) 1901-1970

APRIL

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	.3	.3	.4	.4	.4	.4	.4	.4
= OR >5000	.6	.7	.8	.8	.8	.8	.8	.8
= OR >3500	2.3	3.3	3.7	3.7	3.8	3.8	3.8	3.8
= OR >2000	8.9	13.4	14.6	14.9	14.9	14.9	14.9	14.9
= OR >1000	22.8	38.1	43.1	44.3	44.6	44.6	44.6	44.6
= OR >600	27.9	50.5	60.7	63.7	64.4	64.6	64.6	64.6
= OR >300	28.5	52.0	63.4	67.2	68.1	68.4	68.4	68.4
= OR >150	28.7	52.3	64.0	68.0	68.9	69.3	69.3	69.3
= OR >0	28.7	53.1	65.9	71.2	72.8	74.6	75.1	75.1
TOTAL	559	1032	1281	1384	1415	1450	1460	1460

TOTAL NUMBER OF OBS: 1945

PCT FREQ NH <5/8: 24.9

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8	OBSCD	OBS	TOTAL
2.6	1.5	6.2	7.5	6.7	7.5	13.7	12.8	36.2	5.3	2042		

## APRIL

PERIOD: (PRIMARY) 1945-1970  
(OVER-ALL) 1901-1970AREA 0008 DUTCH HARBOR  
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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.2	.0	*	*	*	.2	.2	.1	*	*	.0	.0	*	.1	.0	.0	.0	.0	19	.8
NO PCP	*	.0	.0	.0	.1	.3	.3	.1	.4	.2	.1	.2	.1	.0	*	.0	.0	*	38	1.7
TOTAL	5	0	1	1	3	2	11	5	10	5	2	4	4	2	1	0	0	1	57	2.5
PCP	.2	*	.1	*	.3	.2	.1	.2	.0	.2	.0	.1	.1	.1	*	.0	.0	.0	38	1.7
NO PCP	.0	*	*	*	.2	*	*	.0	.1	.1	.1	.1	.0	.0	.0	*	.0	.0	22	1.0
TOTAL	5	2	3	2	10	5	3	4	3	8	3	5	2	3	1	1	0	0	60	2.6
PCP	.1	.1	.1	.1	.1	.3	.5	.6	.3	.1	.3	.2	.3	.4	.3	.1	.0	*	90	3.9
NO PCP	*	.0	.0	*	.1	.1	.1	.3	.1	.2	.3	.3	.1	.1	.0	.2	.0	.0	46	2.0
TOTAL	4	3	3	4	5	9	14	19	9	8	12	10	10	11	6	8	0	1	136	5.9
PCP	.1	.1	.2	.3	.3	.2	1.0	.7	.7	.3	.4	.6	.3	.3	.4	.3	.0	.0	146	6.3
NO PCP	.2	.1	.2	.0	.2	.5	.7	.9	1.0	.5	.4	.4	1.3	.6	.5	.3	.0	*	178	7.7
TOTAL	7	4	8	7	13	17	38	37	39	19	19	23	37	22	21	12	0	1	324	14.1
PCP	.3	.1	.2	*	.3	.1	.5	.3	.7	.6	.8	.8	.8	.3	.6	.5	.0	.0	163	7.1
NO PCP	1.3	1.0	.7	.5	.9	.8	.9	1.2	2.1	1.2	2.5	2.7	4.2	1.8	1.7	1.5	.0	.1	577	25.1
TOTAL	39	24	21	12	28	22	32	35	65	41	76	82	114	49	52	46	0	2	740	32.1
PCP	*	*	.1	*	.1	.0	*	*	.1	.1	.2	.3	.3	.2	.3	.2	.0	.0	47	2.0
NO PCP	3.4	1.3	1.4	1.1	1.1	1.0	1.4	2.2	2.5	2.0	3.3	4.0	5.8	2.7	3.7	3.0	.0	.8	939	40.8
TOTAL	79	31	35	26	28	23	33	52	59	49	80	100	142	67	92	72	0	18	986	42.8
TOTAL PCT	139 6.0	64 2.8	71 3.1	52 2.3	87 3.8	78 3.4	131 5.7	152 6.6	185 8.0	130 5.6	192 8.3	224 9.7	309 13.4	154 6.7	173 7.5	139 6.0	0	23 1.0	2303 100.0	

APRIL

PERIOD: (PRIMARY) 1945-1970  
(OVER-ALL) 1901-1970

AREA 00C8 DUTCH HARBR  
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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	*	1	*
	4-10	.1	.0	.0	.0	.1	.0	.1	*	.0	.0	.0	.0	.0	*	*	.0	.0	.0	12	.4
	11-21	.0	.0	.0	.0	.0	*	.1	.1	.2	.1	*	.0	.1	*	.0	*	.0	.0	22	.8
	22+	.1	.0	.0	.0	.0	*	.2	.1	.1	.1	*	.0	.1	.0	.0	.0	.0	.0	25	.9
	TOTAL	5	0	1	1	3	2	11	4	10	5	2	5	4	2	1	1	0	1	60	2.2
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	4-10	.1	.1	.0	.0	.0	.0	.0	.0	*	.0	*	.0	.0	.0	.0	.1	.0	.0	11	.4
	11-21	.1	.1	.0	*	.1	.1	*	.1	*	.1	*	.0	.0	*	.0	.0	.0	.0	28	1.0
	22+	.1	*	.1	*	.2	.1	.1	.1	.1	.1	.1	.0	.1	.1	*	.0	.0	.0	34	1.2
	TOTAL	7	6	3	3	11	5	3	4	4	8	4	5	2	3	1	4	0	0	73	2.7
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	*	.0	*	3	.1
	4-10	.1	*	.0	.1	.0	*	.1	*	.1	.1	.1	.1	.1	.1	*	.1	.0	.0	29	1.1
	11-21	.1	*	.1	.0	.1	.1	.3	.3	*	.1	.1	.1	.1	.1	.1	.3	.0	.0	57	2.1
	22+	*	.1	.1	.1	.1	.2	.2	.4	.3	.1	.2	.3	.1	.2	.1	.1	.0	.0	69	2.5
	TOTAL	7	4	6	5	5	10	15	20	11	9	12	12	10	11	6	14	0	1	158	5.8
2<5	0-3	.0	*	.1	.0	*	.0	*	.0	*	.0	.0	.0	.0	.0	*	.0	.0	.1	11	.4
	4-10	.1	*	.1	*	.1	*	.2	.1	.1	.1	*	.1	.1	*	.2	.1	.0	.0	45	1.6
	11-21	.3	.1	.1	.1	.3	.2	.5	.5	.5	.2	.3	.5	.6	.3	.4	.3	.0	.0	142	5.2
	22+	*	.1	.1	.1	.1	.4	.7	.9	.8	.4	.4	.4	.6	.5	.3	.1	.0	.0	164	6.0
	TOTAL	10	8	11	8	15	19	39	41	41	21	21	27	37	22	23	15	0	4	362	13.2
5<10	0-3	*	.0	.1	*	.1	.1	.1	*	.1	.1	*	.1	*	.0	.0	*	.0	.2	29	1.1
	4-10	.5	.2	.3	.1	.4	.1	.2	.1	.4	.2	.1	.2	.6	.1	.4	.4	.0	.0	123	4.5
	11-21	.9	.4	.4	.3	.4	.3	.7	.5	.9	.7	1.4	1.7	1.9	1.0	.9	.9	.0	.0	361	13.2
	22+	.3	.4	.3	.2	.4	.4	.5	.8	1.2	.8	1.6	1.6	1.9	.8	.9	.3	.0	.0	337	12.3
	TOTAL	46	27	29	16	36	25	39	40	70	47	87	100	122	54	60	46	0	6	850	31.0
10+	0-3	.4	*	.1	.1	*	.0	.2	*	.2	*	.2	.1	.3	.0	.1	.3	.0	1.0	84	3.1
	4-10	1.3	.4	.6	.5	.7	.3	.6	.6	1.1	.8	1.2	1.0	1.7	.6	.8	1.0	.0	.0	363	13.2
	11-21	1.3	.5	.7	.5	.5	.6	.7	.9	1.3	1.0	1.6	1.8	3.4	1.4	1.8	1.2	.0	.0	525	19.1
	22+	.5	.3	.2	.1	.1	.2	.3	.7	.4	.5	.9	1.5	1.4	.9	1.2	.7	.0	.0	268	9.8
	TOTAL	96	34	42	32	39	29	47	61	82	63	106	119	187	78	110	88	0	27	1240	45.2
	TOTAL	171	79	92	65	109	90	154	172	218	153	232	268	362	170	201	168	0	39	2743	100.0
	PCT	6.2	2.9	3.4	2.4	4.0	3.3	5.6	6.3	7.9	5.6	8.5	9.8	13.2	6.2	7.3	6.1	.0	1.4	100.0	

APRIL

PERIOD: (PRIMARY) 1945-1970  
(OVER-ALL) 1901-1970

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH > 4/8), AND OCCURRENCE OF NH < 5/8 BY HOUR													
HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH < 5/8 ANY HGT	TOTAL OBS
00003	4.1	1.0	4.5	18.7	27.6	11.8	3.2	.2	.2	.0	71.4	28.6	507
06009	5.1	1.0	4.1	18.9	31.1	11.9	3.1	.4	.6	.2	76.4	23.6	488
12015	9.3	.2	2.8	21.3	27.6	10.4	2.8	.2	.0	.2	75.0	25.0	460
18021	4.7	1.2	3.5	20.5	31.5	10.2	2.8	.8	.2	.0	75.4	24.6	508
TOT	113	17	74	389	579	218	58	8	5	2	1463	500	1963
PCT	5.8	.9	3.8	19.8	29.5	11.1	3.0	.4	.3	.1	74.5	25.5	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR									
HOUR (GMT)	< 1/2	1/2 < 1	1 < 2	2 < 5	5 < 10	10+	TOTAL OBS		
00003	2.8	2.4	4.8	13.9	23.1	53.0	502		
06009	2.7	1.6	6.0	9.7	28.5	51.5	485		
12015	2.9	.4	5.7	15.1	33.6	42.3	456		
18021	1.2	2.4	5.4	15.1	28.1	47.8	502		
TOT	46	24	106	262	548	949	1945		
PCT	2.4	1.7	5.4	13.5	28.2	48.8	100.0		

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR CEILING HGT (FEET, NH > 4/8), BY HOUR						
HOUR (GMT)	< 150 < 50YD	< 600 < 1	< 1000 < 5	1000+ AND 5+	NH < 5/8 AND 5+	TOTAL OBS
00003	4.2	11.4	36.9	56.9	26.3	502
06009	5.2	11.3	36.3	41.4	22.3	485
12015	10.1	13.8	41.2	35.3	23.5	456
18021	4.8	10.8	37.8	38.6	23.5	502
TOT	116	229	739	741	465	1945
PCT	6.0	11.8	38.0	38.1	23.9	100.0



APRIL

PERIOD: (PRIMARY) 1945-1970  
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TABLE 13

TEMP F	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP										
	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100			
50/54	.1	.0	.0	.0	.1	.2	.1	.0			.0
45/49	.0	.0	.0	.2	.4	1.0	1.0	.5			.5
40/44	.0	.0	.1	.3	2.4	5.2	7.4	10.5			10.5
35/39	.0	.0	.1	.8	3.9	9.2	17.2	22.2			22.2
30/34	.0	.0	.0	.2	.8	2.1	4.7	5.7			5.7
25/29	.0	.0	.0	.0	.1	.6	.7	1.6			1.6
20/24	.0	.0	.0	.0	.0	.3	.3	.2			.2
TOTAL	1	0	2	28	146	349	595	766			766
PCT	.1	.0	.1	1.5	7.7	18.5	31.5	40.6			40.6

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP												
N	NE	E	SE	S	SW	W	NW	VAR	CALM			
.1	.0	.0	.0	.1	.1	.1	.0	.0	.1			
.2	.4	.1	.3	.7	.8	.4	.2	.0	.1			
1.2	.8	1.5	5.5	6.3	5.3	3.7	1.2	.0	.4			
3.8	3.2	4.7	6.6	6.7	9.8	11.9	5.9	.0	.8			
3.0	1.1	1.0	.3	.5	.5	2.8	3.9	.0	.3			
.3	.3	.1	.1	.0	.2	.5	1.3	.0	.3			
.4	.0	.0	.0	.0	.1	.0	.3	.0	.1			
169	109	139	240	271	315	366	241	0	37			
9.0	5.8	7.4	12.7	14.4	16.7	19.4	12.8	.0	2.0			

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR										
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS	
00003	53	48	45	39	32	26	22	39.0	748	
06009	51	45	43	38	30	25	22	37.7	705	
12015	54	45	43	37	30	26	21	37.2	640	
18021	46	44	43	37	30	24	21	37.2	699	
TOT	54	46	43	38	31	25	21	37.8	2792	

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR									TOTAL
HOUR (GMT)	0-29	30-59	60-69	70-79	80-89	90-100	MEAN	OBS	
00003	.0	2.3	11.1	23.4	29.4	33.8	83	530	
06009	.2	1.8	5.9	19.4	31.4	41.2	85	490	
12015	.0	.7	5.0	14.6	33.7	45.9	86	403	
18021	.0	1.3	8.0	15.0	32.3	43.5	86	474	
TOT	1	30	146	349	599	772	85	1897	

PERIOD: (PRIMARY) 1945-1970  
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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	21	25	29	33	37	41	45	49	TOT	W	WD
	24	28	32	36	40	44	48	52		FOG	FOG
14/16	.0	.0	.0	.0	.0	.0	.0	*	1	.0	*
11/13	.0	.0	.0	.0	.0	.0	*	*	2	.0	.1
9/10	.0	.0	.0	.0	*	.1	.4	.1	13	.0	.6
7/8	.0	.0	.0	.0	.1	.6	.4	*	23	*	1.0
6	.0	.0	.0	.0	.1	.8	.3	*	26	.0	1.2
5	.0	.0	.0	.0	.4	2.0	1.0	.0	72	.4	3.0
4	.0	.0	.0	*	.8	2.2	.2	.0	69	.4	2.9
3	.0	.0	.0	.1	1.1	2.9	.1	.0	89	.2	4.0
2	.0	.0	*	.2	4.7	4.1	*	.0	191	.7	8.3
1	.0	.0	.0	.5	7.7	1.5	*	.0	206	.4	9.3
0	.0	.0	.1	1.3	11.3	1.7	*	.0	307	.7	13.8
-1	.0	.0	.0	2.2	9.0	.3	.0	.0	255	.2	11.8
-2	.0	*	.0	4.8	6.9	.4	.0	.0	258	.2	12.0
-3	.0	.0	.2	3.1	2.6	.2	.0	.0	129	.0	6.1
-4	.0	*	.2	3.3	1.9	.3	.0	.0	121	*	5.7
-5	.0	.1	1.0	2.5	1.1	.1	.0	.0	103	*	4.8
-6	.0	.0	.9	.8	.5	.0	.0	.0	45	*	2.1
-7/-8	.0	.3	1.3	1.6	.7	.0	.0	.0	84	.0	4.0
-9/-10	.0	.6	1.3	.7	.4	*	.0	.0	64	.0	3.0
-11/-13	.1	.9	.4	.3	.3	.0	.0	.0	44	.0	2.1
-14/-16	.5	*	.1	.1	.0	.0	.0	.0	16	.0	.8
-17/-19	.1	.0	*	*	.0	.0	.0	.0	4	.0	.2
TOTAL	15	44	120	456	1053	374	54	6	2122	70	2052
PCT	.7	2.1	5.7	21.5	49.6	17.6	2.5	.3	100.0	3.3	96.7

PERIOD: (PRIMARY) APRIL AREA 0008 DUTCH HARBOR  
(OVER-ALL) 1963-1970 51-55N 165-172W

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N										NE										TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+										
<1	.1	.5	.0	.0	.0	.0	7	.0	.1	.0	.0	.0	.0	.0	1	14							
1-2	.0	1.3	.9	.0	.0	.0	25	.0	.6	.6	.0	.0	.0	.0	.0	10							
3-4	.0	1.0	.8	.2	.0	.0	23	.0	.3	.4	.2	.0	.0	.0	.0	17							
5-6	.0	.2	.6	.0	.1	.0	10	.0	.1	.5	.0	.0	.0	.0	.0	2							
7	.0	.0	.1	.6	.0	.0	8	.1	.1	.0	.0	.0	.0	.0	.0	0							
8-9	.0	.0	.3	.4	.1	.0	9	.0	.0	.0	.0	.0	.0	.0	.0	0							
10-11	.0	.0	.2	.0	.0	.0	2	.0	.0	.0	.0	.0	.0	.0	.0	0							
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.1	.0	.0	.0	.0	1							
13-16	.0	.0	.0	.1	.0	.0	1	.0	.0	.0	.0	.0	.0	.0	.0	0							
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0							
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0							
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0							
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0							
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0							
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0							
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0							
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0							
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0							
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0							
TOTAL	1	35	32	15	.0	.0	85	1	13	18	3	.0	.0	.0	.0	35							
PCT	.1	3.0	2.8	1.3	.2	.0	7.4	.1	1.1	1.6	.3	.0	.0	.0	.0	3.0							

HGT	E										SE										TOTAL	48+	TOTAL
<1	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL		
1-2	.0	.3	.0	.0	.0	.0	3	.0	.2	.0	.0	.0	.0	2	.0	.2	.0	.0	.0	.0	.0	2	
3-4	.0	.8	.7	.0	.0	.0	17	.0	.3	.8	.0	.0	.0	12	.0	.3	.8	.0	.0	.0	.0	12	
5-6	.1	.4	.5	.3	.0	.0	16	.0	.3	1.0	.3	.0	.0	18	.0	.3	1.0	.3	.0	.0	.0	18	
7	.0	.3	.7	.3	.0	.0	14	.0	.3	1.6	.8	.2	.0	33	.0	.3	1.6	.8	.2	.0	.0	33	
8-9	.0	.0	.3	.1	.1	.0	6	.0	.3	1.0	2.2	.2	.0	43	.0	.3	1.0	2.2	.2	.0	.0	43	
10-11	.0	.0	.4	.1	.0	.0	6	.0	.2	.4	1.6	.3	.0	29	.0	.2	.4	1.6	.3	.0	.0	29	
12	.0	.0	.0	.4	.2	.0	7	.0	.0	.1	.7	.3	.0	12	.0	.0	.1	.7	.3	.0	.0	12	
13-16	.0	.0	.2	.3	.0	.0	8	.0	.0	.3	.3	.1	.0	5	.0	.0	.3	.3	.1	.0	.0	5	
17-19	.0	.0	.0	.2	.2	.0	4	.0	.0	.0	.4	.0	.0	1	.0	.0	.0	.4	.0	.0	.0	1	
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.1	.0	.0	0	.0	.0	.0	.1	.0	.0	.0	0	
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	
TOTAL	1	20	33	19	8	.0	81	0	18	60	74	12	.0	164	0	18	60	74	12	.0	.0	164	
PCT	.1	1.7	2.9	1.6	.7	.0	7.0	.0	1.6	5.2	6.4	1.0	.0	14.2	.0	1.6	5.2	6.4	1.0	.0	.0	14.2	

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S										SW										TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	
<1	.2	.7	.0	.0	.0	.0	10	.4	.3	.0	.0	.0	.0	9	.0	.0	.0	.0	.0	.0	9
1-2	.0	1.3	.8	.0	.0	.0	24	.0	.5	1.6	.0	.0	.0	25	.0	.0	.0	.0	.0	.0	25
3-4	.0	.8	1.4	.5	.0	.0	31	.0	1.0	1.0	.6	.0	.0	31	.0	.0	.0	.0	.0	.0	31
5-6	.0	.3	1.4	1.0	.1	.0	31	.0	.5	3.0	.6	.0	.0	48	.0	.0	.0	.0	.0	.0	48
7	.0	.1	1.2	1.4	.1	.0	32	.0	.3	1.1	2.4	.1	.0	46	.0	.0	.0	.0	.0	.0	46
8-9	.0	.0	.9	1.0	.2	.0	24	.0	.1	.6	1.5	.5	.0	31	.0	.0	.0	.0	.0	.0	31
10-11	.0	.0	.3	1.1	.3	.0	20	.0	.0	.5	1.4	.2	.0	24	.0	.0	.0	.0	.0	.0	24
12	.0	.0	.0	.2	.0	.0	2	.0	.0	.1	.2	.0	.0	3	.0	.0	.0	.0	.0	.0	3
13-16	.0	.0	.0	.4	.1	.0	6	.0	.0	.0	.3	.0	.0	3	.0	.0	.0	.0	.0	.0	3
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.1	.0	.0	1	.0	.0	.0	.0	.0	.0	1
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	2	36	69	65	8	0	180	5	33	93	81	9	0	221	0	0	0	0	0	0	221
PCT	.2	3.1	6.0	5.6	.7	.0	15.5	.4	2.9	8.0	7.0	.8	.0	19.1	.0	.0	.0	.0	.0	.0	19.1

HGT	W										NW										TOTAL	GRAND TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+		
<1	.2	.5	.0	.0	.0	.0	8	.2	.3	.0	.0	.0	.0	5	.0	.0	.0	.0	.0	.0	5	45
1-2	.3	1.1	1.5	.0	.0	.0	33	.0	.9	1.0	.0	.0	.0	21	.0	.0	.0	.0	.0	.0	21	171
3-4	.1	.9	2.1	.2	.0	.0	37	.2	1.1	1.3	.2	.0	.0	32	.0	.0	.0	.0	.0	.0	32	198
5-6	.0	.6	3.9	1.3	.1	.0	68	.0	.0	1.5	.3	.1	.0	21	.0	.0	.0	.0	.0	.0	21	232
7	.0	.1	2.1	1.3	.0	.0	40	.0	.0	.2	.6	.1	.0	10	.0	.0	.0	.0	.0	.0	10	187
8-9	.0	.0	1.6	2.1	.2	.0	44	.0	.1	.3	.8	.1	.0	15	.0	.0	.0	.0	.0	.0	15	158
10-11	.0	.1	.4	1.2	.4	.0	25	.0	.0	.3	.4	.0	.0	8	.0	.0	.0	.0	.0	.0	8	98
12	.0	.0	.2	.2	.1	.1	6	.0	.0	.0	.1	.0	.0	1	.0	.0	.0	.0	.0	.0	1	30
13-16	.0	.0	.0	.2	.1	.0	3	.0	.0	.0	.3	.0	.0	3	.0	.0	.0	.0	.0	.0	3	25
17-19	.0	.0	.0	.3	.0	.0	3	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	4
20-22	.0	.0	.0	.2	.0	.0	2	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	3
23-25	.0	.0	.0	.0	.1	.1	2	.0	.0	.0	.0	.1	.0	1	.0	.0	.0	.0	.0	.0	1	3
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.2	.0	2	.0	.0	.0	.0	.0	.0	2	2
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
TOTAL	6	38	135	79	11	2	271	4	27	52	30	6	0	119	0	0	0	0	0	0	119	1156
PCT	.5	3.3	11.7	6.8	1.0	.2	23.4	.3	2.3	4.5	2.6	.5	.0	10.3	.0	.0	.0	.0	.0	.0	10.3	100.0

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1970

APRIL

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	2.0	2.8	.0	.0	.0	.0					56
1-2	.3	6.7	7.7	.0	.0	.0					171
3-4	.5	5.8	8.4	2.4	.0	.0					200
5-6	.0	2.1	13.1	4.1	.5	.0					232
7	.1	.9	5.9	8.6	.5	.0					187
8-9	.0	.3	4.4	7.4	1.4	.0					158
10-11	.0	.1	1.8	5.2	1.3	.0					98
12	.0	.0	.8	1.3	.4	.1					30
13-16	.0	.0	.0	1.8	.3	.0					25
17-19	.0	.0	.0	.3	.0	.0					4
20-22	.0	.0	.0	.0	.0	.0					3
23-25	.0	.0	.0	.0	.2	.1					3
26-32	.0	.0	.0	.0	.2	.0					2
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	33	220	492	366	56	2					1169
PCT	2.8	18.8	42.1	31.3	4.8	.2					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.8	4.6	7.1	5.2	3.4	1.6	.5	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	297	4
6-7	.0	.8	4.8	7.9	9.1	6.3	2.9	1.3	1.7	.2	.2	.2	.0	.0	.0	.0	.0	.0	.0	450	6
8-9	.0	.2	.9	3.0	7.0	5.5	4.6	1.4	3.0	.3	.2	.0	.2	.0	.0	.0	.0	.0	.0	335	8
10-11	.0	.0	.0	.3	1.3	1.4	.8	.4	.9	.5	.2	.0	.0	.0	.0	.0	.0	.0	.0	73	10
12-13	.0	.0	.0	.1	.3	.5	.6	.2	.6	.2	.2	.1	.0	.0	.0	.0	.0	.0	.0	35	11
>13	.0	.0	.0	.0	.0	.2	.0	.2	.4	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	12	14
INDET	6.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	78	0
TOTAL	88	72	163	210	269	197	120	45	85	14	12	3	2	0	0	0	0	0	0	1280	6
PCT	6.9	5.6	12.7	16.4	21.0	15.4	9.4	3.5	6.6	1.1	.9	.2	.2	.0	.0	.0	.0	.0	.0	100.0	

MAY

PERIOD: (PRIMARY) 1942-1969  
(OVER-ALL) 1899-1969

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FOG PCPN	SMOKE	DUST	SIG	
N	.2	.0	.3	.0	.4	.0	.0	1.0	23	.0	.1	.2	.0	6.1	176
NNE	.3	.0	.5	.0	.1	.0	.0	.8	20	.0	.2	.0	.0	2.4	82
NE	.8	.*	.8	.0	.2	.0	.0	1.6	39	.0	.6	.2	.0	3.2	135
ENE	.8	.0	.5	.0	.1	.0	.0	1.3	32	.0	.3	.*	.0	2.5	100
E	1.0	.1	.3	.0	.1	.0	.0	1.4	33	.0	.6	.*	.*	3.0	123
ESE	1.1	.1	.4	.0	.*	.0	.0	1.6	38	.0	.6	.*	.0	2.5	114
SE	1.1	.0	.5	.0	.0	.0	.0	1.5	37	.0	.8	.0	.0	3.5	142
SSE	1.2	.*	.6	.0	.1	.0	.*	1.9	46	.0	.6	.*	.0	2.5	122
S	.4	.1	.7	.0	.1	.0	.0	1.3	30	.0	.9	.1	.0	2.2	178
SSW	.2	.*	.5	.0	.*	.0	.0	.7	17	.0	.5	.0	.0	2.4	87
SW	.3	.1	.8	.0	.1	.0	.0	1.4	33	.0	.8	.*	.0	5.6	187
WSW	.7	.1	.3	.0	.2	.0	.*	1.2	28	.0	.4	.0	.0	5.1	161
W	.5	.2	.4	.0	.3	.0	.*	1.3	30	.0	.4	.0	.*	8.6	246
WNW	.2	.*	.3	.0	.1	.0	.0	.6	14	.0	.3	.0	.0	5.3	148
NW	.3	.2	.3	.0	.1	.0	.1	.9	21	.0	.4	.1	.0	6.4	185
NNW	.3	.1	.3	.0	.2	.0	.1	.9	22	.0	.1	.1	.0	5.2	153
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.*	1
CALM	.0	.0	.1	.0	.*	.0	.0	.2	4	.0	.1	.1	.0	2.1	60
TOT OBS	220	24	181	0	50	0	8	19.5	467	0	185	24	2	1722	2400
TOT PCT	9.2	1.0	7.5	.0	2.1	.0	.3			.0	7.7	1.0	.1	71.8	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FOG PCPN	SMOKE	DUST	SIG	
00E03	9.6	.5	7.4	.0	3.3	.0	.0	20.3	135	.0	7.1	1.2	.2	71.3	666
06E09	8.6	1.3	7.3	.0	1.1	.0	.5	18.0	111	.0	8.8	1.5	.2	71.6	616
12E15	9.0	1.6	6.1	.0	1.3	.0	.4	17.5	97	.0	5.6	.4	.0	76.5	553
18E21	9.2	.8	9.3	.0	2.7	.0	.5	22.0	132	.0	8.8	.8	.0	68.3	599
TOT	222	25	184	0	52	0	8		475	0	185	24	2	1748	2434
PCT	9.1	1.0	7.6	.0	2.1	.0	.3	19.5		.0	7.6	1.0	.1	71.8	100.0

MAY

PERIOD: (PRIMARY) 1942-1969  
(OVER-ALL) 1899-1969

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-3	4-10	11-21	22-33	34-47	48+	TOTAL OBS	PCT FREQ	MEAN SPD		00	03	06	09	12
N	.4	2.5	3.0	1.0	.2	*	222	7.2	14.1		7.6	12.3	6.1	7.4	7.4
NNE	.2	1.3	1.4	.6	.1	.0	111	3.6	14.2		3.2	3.8	4.4	2.5	3.7
NE	.9	2.2	2.1	.5	.2	.0	183	5.9	11.9		6.4	8.5	6.3	6.2	4.3
ENE	.3	1.5	1.7	.5	.1	.0	126	4.1	13.9		4.1	8.5	3.8	3.7	3.9
E	.4	1.4	2.1	.6	.2	.0	148	4.8	14.3		7.3	4.6	5.7	.0	2.7
ESE	.1	1.0	2.3	.8	.1	.0	134	4.4	16.0		3.9	6.2	3.5	9.9	4.8
SE	.5	1.9	2.0	1.2	.2	*	177	5.8	15.1		5.3	4.6	7.0	4.9	6.2
SSE	.1	1.8	2.1	.8	.2	.0	150	4.9	14.5		5.0	7.7	3.9	4.9	5.8
S	.8	2.6	3.1	1.0	.1	.0	235	7.6	13.3		9.1	6.2	7.6	4.9	6.8
SSW	.1	1.6	1.5	.5	.1	.0	117	3.8	14.3		3.3	3.8	4.2	6.2	3.9
SW	.9	2.7	3.0	1.0	.4	.0	248	8.1	14.1		7.7	3.8	8.2	4.9	8.3
WSW	.1	1.6	2.3	1.9	.3	*	194	6.3	18.1		7.1	3.1	4.4	9.9	7.5
W	.4	2.4	3.6	2.5	.6	.1	295	9.6	17.4		8.2	5.4	9.8	8.6	11.2
WNW	.3	2.0	2.5	1.3	.2	.0	192	6.2	15.3		5.4	6.2	6.7	7.4	6.4
NW	.6	2.3	3.8	1.7	.2	*	262	8.5	15.6		8.2	6.2	8.3	13.6	8.1
NNW	.3	1.7	2.8	1.3	.1	.1	192	6.2	16.0		5.7	10.0	6.9	3.7	5.8
VAR	*	.0	.0	.0	.0	.0	1	*	1.0		.0	.0	.0	.0	.2
CALM	3.0	945	1213	530	91	10	91	3.0	.0		2.3	.0	3.1	1.2	3.1
TOT OBS	289	30.7	39.4	17.2	3.0	.3	3078	100.0	14.5		777	130	684	81	517
TOT PCT	9.4	30.7	39.4	17.2	3.0	.3	100.0				100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD			00	03	06	09	12
N	2.4	4.8	2.7	.8	*	333	10.8	14.1			10.8	16.2	10.5	9.9	11.0
NE	2.5	4.8	2.0	.6	.1	309	10.0	12.7			10.6	16.9	10.1	9.9	8.1
E	1.5	4.2	2.8	.7	.0	282	9.2	15.1			11.2	10.8	9.2	9.9	7.5
SE	2.1	4.5	3.1	.8	.1	327	10.6	14.8			10.3	12.3	11.0	9.9	12.0
S	2.6	5.3	2.5	1.0	.1	352	11.4	13.6			12.5	10.0	11.8	11.1	10.6
SW	2.9	5.5	4.2	1.7	.2	442	14.4	15.9			14.8	6.9	12.6	14.8	15.9
W	2.3	6.7	4.5	2.2	.2	487	15.8	16.5			13.6	10.8	16.5	16.0	17.6
NW	2.5	6.0	4.6	1.5	.1	454	14.7	15.8			13.9	16.2	15.2	17.3	13.9
VAR	*	.0	.0	.0	.0	1	*	1.0			.0	.0	.0	.0	.2
CALM	3.0	1290	811	290	21	3078	3.0	.0			2.3	.0	3.1	1.2	3.1
TOT OBS	666	41.9	26.3	9.4	.7	3078	100.0	14.5			777	130	684	81	517
TOT PCT	21.6	41.9	26.3	9.4	.7	100.0					100.0	100.0	100.0	100.0	100.0

MAY

PERIOD: (PRIMARY) 1942-1969  
(OVER-ALL) 1899-1969

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	WIND SPEED (KNOTS)						PCT		TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	CALM	MEAN	
00003	7.1	32.0	40.9	15.1	3.0	.0	2.0	14.1	100.0
06009	7.3	29.7	38.6	17.8	3.5	.3	2.9	14.7	100.0
12015	3.1	28.2	41.3	21.1	3.7	.0	2.6	15.7	100.0
18021	7.4	32.2	37.1	16.1	1.8	1.0	4.4	14.0	100.0
TOT	197	945	1213	530	91	10	91	14.5	3077
PCT	6.4	30.7	39.4	17.2	3.0	.3	3.0		100.0

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION								TOTAL	MEAN
	0-2	3-4	5-7	8-10	11-13	14-16	17-19	20-22		
N	.8	.5	2.1	3.5	126	6.4				
NNE	.5	.2	.9	2.0	66	6.4				
NE	.4	.4	1.1	3.1	90	6.7				
ENE	.3	.3	1.4	2.3	77	6.7				
E	.1	.2	1.2	3.5	90	7.3				
ESE	.1	.3	.9	3.2	81	7.3				
SE	.4	.2	.8	3.8	95	7.1				
SSE	.2	.3	.9	3.8	95	7.2				
S	.3	.5	1.6	4.6	128	7.0				
SSW	.2	.3	.9	2.7	75	7.0				
SW	.5	.7	2.1	4.5	144	6.8				
WSW	.4	.3	1.9	4.6	132	7.0				
W	.5	1.2	3.0	6.2	199	6.8				
WNW	.3	.3	2.1	3.5	113	6.9				
NW	.3	.5	3.0	4.3	149	6.9				
NNW	.7	.5	1.9	3.5	119	6.4				
VAR	.0	.0	.0	.1	1	8.0				
CALM	.3	.4	.6	1.1	45	5.8				
TOT OBS	111	129	484	1101	1825	6.8				
TOT PCT	6.1	7.1	26.5	60.3	100.0					

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	NH <5/8												TOTAL OBS					
	0-2	3-4	5-7	8 & OBS	TOTAL OBS	CLOUD COVER	000 149	150 299	300 599	600 999	1000 1999	2000 3499		3500 4999	5000 6499	6500 7999	8000+	ANY HGT
N	.8	.5	2.1	3.5	126	6.4	.3	.0	.3	1.7	2.1	.7	.2	.0	.0	.0	1.6	126
NNE	.3	.2	.9	2.0	66	6.4	.2	.0	.2	.4	1.0	.5	.3	.0	.0	.1	.9	66
NE	.4	.4	1.1	3.1	90	6.7	.7	.1	.1	.7	1.8	.4	.1	.0	.0	.0	1.3	90
ENE	.3	.3	1.4	2.3	77	6.7	.4	.1	.1	.5	1.6	.4	.1	.0	.1	.1	.9	77
E	.1	.2	1.2	3.5	90	7.3	.8	.0	.4	1.1	1.3	.3	.2	.1	.0	.0	.8	90
ESE	.1	.3	.9	3.2	81	7.3	1.0	.0	.1	.9	1.0	.4	.1	.1	.0	.0	.7	81
SE	.4	.2	.8	3.8	95	7.1	.8	.2	.4	.9	1.6	.4	.1	.0	.1	.0	.8	95
SSE	.2	.3	.9	3.6	95	7.2	.9	.1	.2	1.1	1.2	.7	.1	.1	.0	.0	.9	95
S	.3	.5	1.6	4.6	128	7.0	.9	.1	.3	1.1	2.0	.9	.3	.1	.0	.1	1.4	128
SSW	.2	.3	.9	2.7	75	7.0	.4	.0	.3	.8	1.0	.5	.1	.0	.0	.1	.9	75
SW	.5	.7	2.1	4.5	144	6.8	.9	.1	.3	1.5	1.9	1.0	.4	.0	.1	.0	1.9	144
WSW	.4	.3	1.9	4.6	132	7.0	.7	.0	.2	1.2	2.5	1.2	.4	.0	.0	.0	1.0	132
W	.5	1.2	3.0	6.2	199	6.8	.8	.0	.5	2.2	3.2	1.5	.4	.0	.0	.1	2.1	199
WNW	.3	.3	2.1	3.5	113	6.9	.4	.0	.1	1.4	2.0	.6	.5	.1	.0	.1	1.0	113
NW	.3	.5	3.0	4.3	149	6.9	.2	.2	.5	1.4	2.4	1.9	.3	.0	.0	.0	1.4	149
NNW	.7	.5	1.9	3.5	119	6.4	.3	.0	.3	1.2	2.1	.7	.3	.0	.2	.0	1.4	119
VAR	.0	.0	.0	.1	1	8.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	1
CALM	.3	.4	.6	1.1	45	5.8	.3	.0	.1	.4	.7	.2	.1	.0	.0	.0	.8	45
TOT OBS	111	129	484	1101	1825	6.8	181	12	79	337	537	225	72	5	7	6	364	1825
TOT PCT	6.1	7.1	26.5	60.3	100.0		9.9	.7	4.3	18.5	29.4	12.3	3.9	.3	.4	.3	19.9	100.0



TABLE 7  
CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	.5	.7	.7	.7	.7	.7	.7	.7
= OR >5000	.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0
= OR >3500	3.4	4.7	4.9	5.0	5.0	5.0	5.0	5.0
= OR >2000	9.5	15.4	17.3	17.5	17.6	17.6	17.6	17.6
= OR >1000	25.9	40.7	45.7	46.6	46.9	46.9	46.9	46.9
= OR >600	31.8	54.1	62.7	64.7	65.2	65.2	65.2	65.2
= OR >300	32.5	56.6	66.4	68.8	69.4	69.5	69.5	69.6
= OR >150	32.6	56.9	67.0	69.4	70.0	70.1	70.2	70.2
= OR >0	33.0	58.6	70.2	74.3	75.6	77.5	79.7	79.9
TOTAL	606	1075	1289	1363	1388	1423	1462	1467

TOTAL NUMBER OF OBS: 1835 PCT FREQ NH <5/8: 20.1

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)									
0	1	2	3	4	5	6	7	8	TOTAL
3.3	2.4	5.4	4.0	4.7	4.9	9.4	15.2	42.6	8.1 2056

MAY

PERIOD: (PRIMARY) 1942-1969  
(OVER-ALL) 1899-1969

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	*	.2	.1	.1	.3	.1	.1	.1	.0	.0	*	.1	.1	.0	*	.0	.0	.0	31	1.3
NO PCP	*	.0	.1	.1	.2	.3	.5	.4	.4	.3	.3	.2	.3	.1	*	*	.0	.1	80	3.4
TOTAL	2	5	4	6	10	10	15	12	9	6	9	7	8	3	2	1	0	2	111	4.7
1/2<1	.0	*	.3	.2	.3	.3	.1	.3	.2	.1	*	.1	*	.0	*	.1	.0	*	51	2.2
NO PCP	.0	.1	.1	*	.1	.1	.3	*	.3	.1	.1	*	.1	.1	.1	.0	.0	.0	36	1.5
TOTAL	0	3	10	6	9	11	9	7	10	4	3	3	3	2	3	3	0	1	87	3.7
1<2	.2	.1	.1	.2	.2	.2	.3	.5	.3	.1	.1	.1	.1	.2	.2	.1	.0	.0	69	2.9
NO PCP	.1	.1	.2	*	.3	*	.3	.2	.3	.1	.3	.2	.2	*	.1	.2	.0	.0	63	2.7
TOTAL	7	4	7	5	10	6	14	15	14	6	10	7	8	6	7	6	0	0	132	5.6
2<5	.3	.3	.5	.3	.3	.3	.5	.5	.4	.1	.5	.4	.1	.2	.1	.2	.0	.0	121	5.1
NO PCP	.7	.3	.4	.3	.6	.6	.5	.2	.5	.3	.6	.6	.9	.3	.6	.3	.0	.1	190	8.0
TOTAL	23	12	22	16	20	21	25	17	23	11	28	24	24	13	17	13	0	2	311	13.2
5<10	.2	.2	.5	.4	.3	.7	.3	.4	.2	.3	.5	.3	.5	.1	.5	.3	.0	.0	132	5.6
NO PCP	2.5	.7	1.1	.8	1.0	1.1	1.3	1.1	2.4	.6	1.8	1.9	3.6	2.2	2.2	2.0	*	.3	626	26.5
TOTAL	64	22	38	27	29	41	38	35	60	22	53	52	97	55	62	54	1	8	758	32.1
10+	.2	*	.1	.0	.1	.0	.1	.1	.1	*	.2	.2	.4	.1	*	.1	.0	.0	44	1.9
NO PCP	3.1	1.4	2.1	1.6	1.6	1.1	1.6	1.3	2.4	1.6	3.2	2.6	4.1	2.8	3.9	3.0	.0	1.7	922	39.0
TOTAL	77	35	51	37	42	25	41	34	60	38	79	66	105	69	94	73	0	40	966	40.8
TOTAL	173	81	132	97	120	114	142	120	176	87	182	159	245	148	185	150	1	53	2365	100.0
PCT	7.3	3.4	5.6	4.1	5.1	4.8	6.0	5.1	7.4	3.7	7.7	6.7	10.4	6.3	7.8	6.3	*	2.2	100.0	

MAY

PERIOD: (PRIMARY) 1942-1969  
(OVER-ALL) 1899-1969

AREA 0038 DUTCH HARBOR  
51-55N 165-172W

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.1	.0	.0	*	.0	.1	.0	.0	.0	*	.0	.0	.0	.0	.1	9	.3
	4-10	*	*	*	.1	*	*	.1	.1	.1	*	.2	*	*	*	*	.0	.0		30	1.0
	11-21	*	.2	.1	.0	.2	.2	.2	.2	.1	.1	.1	.2	.2	.1	.1	*	.0		62	2.1
	22+	.0	.0	*	*	.1	.1	.2	.1	*	.0	.0	.1	.0	.0	.0	.0	.0		18	.6
	TOTAL	2	6	4	6	11	10	16	13	9	6	10	8	8	3	3	1	0	3	119	4.0
1/2<1	0-3	.0	.0	.0	.0	.0	.0	*	.0	.1	.0	*	.0	.0	.0	.0	.0	.0	*	5	.2
	4-10	.0	*	.1	.1	*	.0	.1	.1	.1	.1	.1	*	*	.0	.0	*	.0		23	.8
	11-21	.0	*	.2	*	.2	.2	.1	.2	.1	.1	*	.1	.0	.0	.1	.1	.0		44	1.5
	22+	.0	*	.1	.1	.1	.1	.0	*	.1	*	.1	.1	.1	.1	.1	.0	.0		25	.8
	TOTAL	0	3	10	6	10	11	9	7	11	6	4	5	3	2	5	4	0	1	97	3.3
1<2	0-3	.0	.0	.0	.0	*	.0	*	.0	*	.0	*	.0	.0	.0	.0	*	.0	.0	5	.2
	4-10	.1	.1	.1	.1	.1	.0	.1	.1	.2	.1	.1	.0	*	.1	.1	*	.0		38	1.3
	11-21	.1	*	.1	.1	.2	.2	.1	.4	.3	.1	.1	.1	.1	.1	.2	.1	.0		74	2.5
	22+	.1	.1	.1	*	.1	.1	.2	.1	.1	*	.1	.2	.1	*	*	.1	.0		45	1.5
	TOTAL	9	5	8	5	12	9	15	15	19	9	12	8	9	7	11	9	0	0	162	5.5
2<5	0-3	.0	.0	.2	.1	.0	.0	.1	.0	*	.0	.1	*	*	.0	.1	.0	.0	.1	25	.8
	4-10	.2	*	.2	.1	.2	.1	.2	.1	.3	.1	.3	.3	.3	.1	.1	.2	.0		88	3.0
	11-21	.5	.2	.2	.3	.2	.4	.5	.4	.4	.2	.6	.2	.2	.2	.4	.1	.0		143	4.8
	22+	.2	.2	.2	.1	.3	.2	.5	.2	.3	.2	.4	.4	.5	.2	.3	.2	.0		127	4.3
	TOTAL	28	15	26	17	23	23	34	20	31	14	43	25	29	14	23	14	0	4	383	12.9
5<10	0-3	.1	*	.2	.1	.1	*	.2	*	.2	.0	.2	*	.1	.1	.2	.1	*	.4	63	2.1
	4-10	.8	.3	.6	.5	.4	.4	.7	.7	.5	.5	.5	.6	.8	.7	.8	.3	.0		277	9.3
	11-21	1.1	.5	.8	.5	.6	.8	.6	.3	1.4	.3	1.0	.9	1.7	.9	1.2	1.1	.0		410	13.8
	22+	.6	.1	.2	.2	.2	.3	.3	.4	.3	.2	.5	.7	1.4	.5	.7	.5	.0		217	7.3
	TOTAL	77	28	55	37	37	47	50	42	73	32	69	68	118	69	89	63	1	12	967	32.6
10+	0-3	.3	.1	.3	*	.2	.1	.2	.1	.4	.1	.4	*	.2	.2	.3	.1	.0	1.5	132	4.4
	4-10	1.3	.9	1.1	.6	.6	.4	.7	.7	1.3	.6	1.6	.7	1.3	1.1	1.2	1.0	.0		447	15.1
	11-21	1.3	.5	.7	.8	.6	.5	.7	.7	.9	.7	1.1	1.0	1.6	1.2	1.9	1.4	.0		466	15.7
	22+	.3	.2	.2	.2	.2	.1	.3	.1	.3	.1	.4	.9	1.1	.7	.9	.6	.0		194	6.5
	TOTAL	96	50	69	49	48	31	53	46	86	47	101	78	125	95	126	94	0	45	1239	41.8
	TOTAL	212	107	172	120	141	131	177	143	229	114	239	192	292	190	257	185	1	65	2967	100.0
	PCT	7.1	3.6	5.8	4.0	4.8	4.4	6.0	4.8	7.7	3.8	8.1	6.5	9.8	6.4	8.7	6.2	*	2.2	100.0	

MAY

PERIOD: (PRIMARY) 1942-1969  
(OVER-ALL) 1899-1969

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH > 4/8), AND  
OCCURRENCE OF NH < 5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH < 5/8 ANY HGT	TOTAL OBS
00003	5.9	1.0	4.0	15.2	29.3	14.7	5.1	.2	.2	.8	76.4	23.6	505
06009	9.4	.4	4.8	19.6	28.1	10.2	3.5	.4	.4	.2	77.1	22.9	480
12015	15.5	.2	3.3	16.9	27.4	10.7	3.6	.5	.5	.2	78.8	21.2	420
18021	8.8	.8	4.8	20.1	29.5	13.2	3.3	.0	.4	.0	81.0	19.0	478
TOT	182	12	80	338	539	231	74	5	7	6	1474	409	1883
PCT	9.7	.6	4.2	18.0	28.6	12.3	3.9	.3	.4	.3	78.3	21.7	100.0

TABLE 11

PERCENT FREQUENCY VSE (NM) BY HOUR

HOUR (GMT)	< 1/2	1/2 < 1	1 < 2	2 < 5	5 < 10	10+	TOTAL OBS
00003	3.9	.6	2.9	9.3	28.5	54.8	484
06009	4.2	1.7	4.2	13.5	28.3	48.0	473
12015	5.3	1.9	4.6	15.7	29.2	43.2	414
18021	3.9	1.5	4.7	12.5	33.0	44.4	464
TOT	79	26	75	232	546	877	1835
PCT	4.3	1.4	4.1	12.6	29.8	47.8	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET, NH > 4/8), BY HOUR

HOUR (GMT)	< 150 < 5000	< 600 < 1	< 1000 < 5	1000+ AND 5+	NH < 5/8 AND 5+	TOTAL OBS
00003	6.4	11.8	32.2	48.1	19.6	484
06009	9.3	15.4	42.5	36.4	21.1	473
12015	15.7	20.0	45.2	36.0	18.8	414
18021	8.6	14.9	42.2	41.6	16.2	464
TOT	180	282	740	747	348	1835
PCT	9.8	15.4	40.3	40.7	19.0	100.0

MAY

PERIOD: (PRIMARY) 1942-1969  
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TABLE 13

TEMP F	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP											PCT FREQ
	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	TOTAL		
55/59	.0	.0	.0	.1	.1	.3	.1	.0	11	.6		
50/54	.0	.0	.0	.0	.6	.9	1.6	.3	61	3.4		
45/49	.0	.0	.1	.2	1.3	4.5	7.5	4.4	328	18.1		
40/44	.0	.0	.1	.3	2.8	9.4	15.2	23.1	922	50.7		
35/39	.0	.0	.0	.6	.9	4.3	8.2	12.1	474	26.1		
30/34	.0	.0	.0	.0	.2	.3	.3	.4	21	1.2		
TOTAL	0	0	5	20	106	357	597	732	1817	100.0		
PCT	.0	.0	.3	1.1	5.8	19.6	32.9	40.3				

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP											VAR	CALM
N	NE	E	SE	S	SW	W	NW	VAR	CALM			
.1	.1	.1	.1	.1	.1	.1	.1	.1	.0			
.4	.2	.3	.3	.5	.3	.4	.6	.0	.2			
1.8	2.8	2.3	2.1	2.5	2.4	1.3	1.7	.0	.9			
4.3	5.6	5.0	5.9	6.4	7.6	7.6	6.5	.1	1.7			
4.9	2.9	1.5	1.1	1.2	2.6	4.9	6.3	.0	.7			
.4	.2	.1	.0	.1	.1	.1	.3	.0	.1			
216	211	168	174	194	237	271	281	.1	64			
11.9	11.6	9.2	9.6	10.7	13.0	14.9	15.5	.1	3.5			

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR											TOTAL OBS
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN			
00003	57	54	50	43	37	34	30	42.9	902		
06009	57	52	47	41	36	34	30	41.6	771		
12015	52	47	45	40	36	34	30	40.2	625		
18021	58	51	48	41	36	34	31	40.9	794		
TOT	58	52	48	41	36	34	30	41.5	3092		

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR											TOTAL OBS
HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN				
00003	.0	2.3	8.0	24.8	33.7	31.3	83				
06009	.0	1.1	4.7	17.5	32.8	43.9	86				
12015	.0	.3	4.6	17.0	33.0	45.1	87				
18021	.0	1.2	5.1	17.3	32.0	44.4	86				
TOT	0	25	106	359	600	734	85				

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MAY

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	29	32	33	36	37	40	41	44	45	48	49	52	53	56	57	TOT	W FOG	WD FOG
14/16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.1	3	.0	.2
11/13	.0	.0	.0	.0	.0	.0	.0	.0	.1	.3	.0	.0	.0	.0	.1	9	.1	.4
9/10	.0	.0	.0	.0	.0	.0	.0	.0	.6	.6	.0	.0	.0	.0	.0	23	.1	1.1
7/8	.0	.0	.0	.0	.0	.0	.2	1.8	.5	.5	.0	.0	.0	.0	.0	46	.3	2.2
6	.0	.0	.0	.0	.0	.0	.4	.9	.2	.2	.0	.0	.0	.0	.0	28	.3	1.2
5	.0	.0	.0	.0	.1	.1	.9	3.1	.2	.2	.0	.0	.0	.0	.0	81	.4	3.9
4	.0	.0	.0	.0	.6	.6	2.5	2.8	.1	.1	.0	.0	.0	.0	.0	114	.9	5.1
3	.0	.0	.0	.0	.7	.7	.8	1.3	.1	.3	.0	.0	.0	.0	.0	84	.3	4.2
2	.0	.0	.1	.1	1.7	1.7	1	2.3	.0	.0	.0	.0	.0	.0	.0	211	1.3	9.9
1	.0	.0	.1	.1	1.8	1.8	10.9	1.0	.7	.0	.0	.0	.0	.0	.0	170	.7	8.2
0	.1	.1	.5	.5	8.2	8.2	3.0	.2	.0	.0	.0	.0	.0	.0	.0	391	1.6	19.1
-1	.0	.0	.2	.2	5.7	5.7	2.5	.2	.0	.0	.0	.0	.0	.0	.0	173	.4	8.8
-2	.0	.0	.5	.5	6.9	6.9	2.5	.2	.0	.0	.0	.0	.0	.0	.0	193	.5	9.7
-3	.0	.0	.7	.7	3.7	3.7	1.5	.1	.0	.0	.0	.0	.0	.0	.0	113	.3	5.7
-4	.1	.1	1.6	1.6	2.7	2.7	1.3	.1	.0	.0	.0	.0	.0	.0	.0	109	.4	5.4
-5	.0	.0	1.2	1.2	1.9	1.9	.4	.1	.0	.0	.0	.0	.0	.0	.0	68	.2	3.4
-6	.0	.0	.6	.6	.6	.6	.2	.0	.0	.0	.0	.0	.0	.0	.0	27	.1	1.3
-7/-8	.2	.2	.5	.5	.8	.8	.2	.1	.0	.0	.0	.0	.0	.0	.0	33	.2	1.6
-9/-10	.2	.3	.3	.3	.1	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	11	.0	.6
-11/-13	.0	.2	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	5	.0	.3
TOTAL	9	123	666	767	287	35	2	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1892	149	1743
PCT	.5	6.5	35.2	40.5	15.2	1.8	.1	.2	.2	.2	.2	.2	.2	.2	.2	100.0	7.9	92.1

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.1	.8	.0	.0	.0	.0	7	.1	.4	.0	.0	.0	.0	4
1-2	.0	.9	.9	.0	.0	.0	14	.1	.8	.9	.0	.0	.0	14
3-4	.0	1.4	1.6	.5	.0	.0	26	.0	1.2	1.6	.0	.0	.0	21
5-6	.0	.4	1.8	.7	.0	.0	21	.0	.3	1.6	.4	.0	.0	17
7	.0	.0	.7	.7	.4	.0	13	.0	.0	.9	.7	.0	.0	12
8-9	.0	.0	.1	.4	.3	.0	6	.0	.0	.0	.1	.1	.0	2
10-11	.0	.0	.0	.4	.0	.0	3	.0	.0	.0	.0	.0	.0	0
12	.0	.0	.0	.3	.0	.0	2	.0	.0	.0	.0	.0	.0	0
13-16	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.1	.0	1
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.1	.0	1
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	1	26	38	22	5	0	92	2	20	38	9	3	0	72
PCT	.1	3.5	5.2	3.0	.7	.0	12.5	.3	2.7	5.2	1.2	.4	.0	9.8

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.0	.5	.0	.0	.0	.0	4	.1	.1	.0	.0	.0	.0	2
1-2	.0	.8	1.1	.0	.0	.0	14	.1	.9	.7	.0	.0	.0	13
3-4	.0	.9	2.3	.0	.0	.0	24	.0	.1	1.1	.5	.0	.0	13
5-6	.0	.1	.7	.0	.0	.0	6	.0	.8	1.1	.9	.0	.0	21
7	.0	.0	.4	.4	.0	.0	6	.0	.3	.8	.5	.0	.0	12
8-9	.0	.0	.1	.1	.3	.0	1	.0	.0	.1	.4	.0	.0	4
10-11	.0	.0	.1	.1	.0	.0	4	.0	.0	.0	.0	.0	.0	0
12	.0	.0	.0	.0	.1	.0	1	.0	.0	.0	.0	.0	.0	0
13-16	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	0	18	34	5	3	0	60	2	17	28	18	0	0	65
PCT	.0	2.4	4.6	.7	.4	.0	8.1	.3	2.3	3.8	2.4	.0	.0	8.8

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S							SW						
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1		.7	.0	.0	.0	.0	5	.1	.1	.0	.0	.0	.0	2
1-2	.1	1.4	.9	.0	.0	.0	18	.1	1.1	.8	.0	.0	.0	15
3-4	.1	1.5	.9	.0	.0	.0	19	.3	2.3	1.5	.4	.0	.0	33
5-6	.0	.4	.9	.4	.0	.0	13	.0	.5	1.1	.7	.0	.0	17
7	.0	.1	.4	.3	.0	.0	6	.0	.1	.7	.3	.0	.0	11
8-9	.0	.0	.1	.0	.0	.0	1	.0	.1	.5	.3	.0	.0	7
10-11	.0	.0	.0	.3	.0	.0	2	.0	.0	.3	.7	.0	.0	7
12	.0	.0	.0	.1	.0	.0	1	.0	.0	.0	.1	.0	.0	1
13-16	.0	.0	.0	.4	.0	.0	3	.0	.0	.0	.1	.3	.0	3
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	2	30	25	11	0	0	68	4	32	36	22	2	0	96
PCT	.3	4.1	3.4	1.5	.0	.0	9.2	.5	4.3	4.9	3.0	.3	.0	13.0

HGT	W										NW										TOTAL	GRAND TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL								
<1	.0	.3	.0	.0	.0	.0	2	.0	.1	.0	.0	.0	.0	1	27							
1-2	.4	1.6	.7	.0	.0	.0	20	.1	1.9	.9	.0	.0	.0	.0	130							
3-4	.0	2.0	1.6	.0	.0	.0	27	.3	2.2	2.3	.0	.0	.0	.0	198							
5-6	.0	.5	2.7	1.2	.0	.0	33	.0	.3	3.4	.5	.0	.0	.0	159							
7	.0	.1	2.3	.9	.1	.0	26	.0	.4	1.2	.8	.0	.0	.0	104							
8-9	.0	.0	.7	.9	.1	.0	13	.0	.0	.7	.5	.1	.0	.0	44							
10-11	.0	.0	.1	.4	.4	.0	7	.0	.0	.1	1.4	.0	.0	.0	34							
12	.0	.0	.0	.8	.0	.1	7	.0	.0	.0	.7	.0	.0	.0	17							
13-16	.0	.0	.1	.3	.3	.0	5	.0	.0	.1	.4	.0	.0	.0	19							
17-19	.0	.0	.0	.0	.1	.0	1	.0	.0	.0	.1	.0	.0	.0	2							
20-22	.0	.0	.1	.0	.0	.0	1	.0	.0	.0	.0	.0	.0	.0	1							
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.1	.1	2							
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0							
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0							
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0							
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0							
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0							
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0							
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0							
TOTAL	3	34	62	34	8	1	142	3	36	65	33	4	1	142	737							
PCT	.4	4.6	8.4	4.6	1.1	.1	19.3	.4	4.9	8.8	4.5	.5	.1	19.3	100.0							

GRAND TOTAL 27 130 198 159 104 44 34 17 19 2 1 2 0 0 0 0 0 0 0 0 0 0 0 737 100.0



TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	2.5	3.1	.0	.0	.0	.0					42
1-2	1.2	9.3	6.9	.0	.0	.0					131
3-4	.7	11.4	12.7	1.5	.0	.0					198
5-6	.0	3.3	13.0	4.8	.0	.0					159
7	.0	1.1	7.3	4.9	.5	.0					104
8-9	.0	.1	2.3	2.8	.7	.0					44
10-11	.0	.0	.7	3.2	.7	.0					34
12	.0	.0	.0	2.0	1.1	.1					17
13-16	.0	.0	.3	1.2	1.1	.0					19
17-19	.0	.0	.0	.1	.1	.0					2
20-22	.0	.0	.1	.0	.0	.0					1
23-25	.0	.0	.0	.0	.1	.1					2
26-32	.0	.0	.0	.0	.0	.0					0
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	33	213	326	154	25	2					753
PCT	4.4	28.3	43.3	20.5	3.3	.3					100.0

TABLE 19

PERIOD (SEC)	PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)																		87+ TOTAL	MEAN HGT	
	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86			
<6	1.6	9.9	12.4	7.4	2.4	.8	1.6	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	323	3
6-7	.0	1.3	6.0	10.0	7.2	2.4	2.2	.6	.8	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	274	5
8-9	.0	.2	1.3	3.4	3.9	2.2	1.6	1.1	1.5	.1	.2	.0	.0	.0	.0	.0	.0	.0	.0	139	7
10-11	.0	.1	.3	.8	1.5	1.1	.9	.2	1.5	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	59	9
12-13	.0	.0	.1	.0	.0	.1	.1	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	6	10
>13	.0	.0	.0	.0	.0	.1	.2	.2	.1	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	7	12
INDET	9.4	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	85	0
TOTAL	98	103	181	192	133	61	59	20	38	3	3	2	0	0	0	0	0	0	0	893	5
PCT	11.0	11.5	20.3	21.5	14.9	6.8	6.6	2.2	4.3	.3	.3	.2	.0	.0	.0	.0	.0	.0	.0	100.0	

JUNE

PERIOD: (PRIMARY) 1943-1969  
(OVER-ALL) 1900-1969

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TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
			DRZL	FRZG PCPN	SNOW					OTHER FRZN PCPN	FG WD	SMOKE HAZE	DUST BLWG	NO SIG WEA	
N	.2	.0	.2	.0	.0	.0	.0	.5	12	.0	1.0	.0	.0	4.1	145
NNE	.2	*	.3	.0	.0	.0	.0	.5	14	.0	.5	.0	.0	3.4	116
NE	.9	*	.5	.0	.0	.0	.0	1.5	38	.0	.7	.0	.0	3.1	138
ENE	.6	.0	.7	.0	.0	.0	.0	1.2	32	.0	.5	*	*	2.5	111
E	1.1	.1	.6	.0	.0	.0	.0	1.7	45	.0	1.0	.1	.0	3.8	172
ESE	.8	*	.6	.0	.0	.0	.0	1.5	38	.0	.7	.1	.0	2.2	116
SE	1.1	.0	.6	.0	.0	.0	.0	1.7	44	.0	2.0	.2	*	4.5	220
SSE	.5	*	.4	.0	.0	.0	.0	.9	23	.0	1.1	.0	.0	2.6	120
S	.6	.1	1.0	.0	.0	.0	.0	1.6	42	.0	1.6	.1	.0	4.4	200
SSW	.3	.0	.3	.0	.0	.0	.0	.7	17	.0	.7	*	.0	3.4	123
SW	.5	.0	.7	.0	.0	.0	.0	1.1	30	.0	.9	*	.0	4.4	170
WSW	.3	.2	.5	.0	.0	.0	.0	.8	22	.0	1.0	.0	.0	5.3	187
W	.3	.1	.5	.0	.0	.0	.0	1.0	25	.0	1.0	*	.0	7.7	253
WNW	.1	.1	.2	.0	.0	.0	.0	.3	9	.0	.7	*	.0	4.2	138
NW	.5	.0	.5	.0	.0	.0	.0	1.0	26	.0	1.1	*	.0	5.3	192
NNW	.3	*	.3	.0	.0	.0	.0	.6	16	.0	.6	*	.0	3.1	113
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	*	1
CALM	.0	.0	.3	.0	.0	.0	.0	.3	7	.0	.8	.0	.0	2.5	94
TOT OBS	217	19	211	0	0	0	0	16.9	440	.0	412	21	2	1734	2609
TOT PCT	8.3	.7	8.1	.0	.0	.0	.0			.0	15.8	.8	.1	66.5	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FOG WD	SMOKE HAZE	DUST BLWG	NO SIG WEA		
00003	7.5	1.1	6.3	.0	.0	.0	.0	14.9	109	.0	16.0	1.1	.0	68.0	731	
06009	8.7	.2	7.5	.0	.0	.0	.0	15.9	104	.0	17.1	.5	.0	66.6	655	
12015	8.3	.8	9.0	.0	.0	.0	.0	17.8	107	.0	13.7	.8	.2	67.5	600	
18021	8.5	.8	9.6	.0	.0	.0	.0	18.5	120	.0	16.5	.8	.2	64.1	649	
TOT	217	19	211	0	0	0	0	16.7	440	0	418	21	2	1754	2635	
PCT	8.2	.7	8.0	.0	.0	.0	.0			.0	15.9	.8	.1	66.6	100.0	

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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-3	4-10	11-21	22-33	34-47	48+	TOTAL OBS	PCT FREQ	MEAN SPD		00	03	06	09	12
N	.9	2.9	1.7	.3	.1	.0	189	5.9	10.1		5.9	6.5	7.1	5.7	5.1
NNE	.5	1.9	1.6	.3	.0	.0	136	4.2	10.7		3.9	3.6	4.2	1.9	3.8
NE	.8	2.3	2.1	.4	*	.0	179	5.6	11.0		5.9	5.0	5.2	2.8	5.3
ENE	.1	1.8	1.5	.8	.1	.0	137	4.3	14.3		3.6	10.1	4.4	5.7	4.2
E	.4	2.5	2.7	.5	.1	*	199	6.2	13.0		7.2	2.9	6.2	.0	6.6
ESE	.2	1.4	2.0	.7	.0	.0	137	4.3	14.5		3.9	5.8	4.5	5.7	5.1
SE	.8	2.5	3.6	1.4	*	.0	266	8.3	13.8		7.9	5.8	9.3	7.5	7.3
SSE	.3	1.8	2.2	.6	*	.0	157	4.9	12.9		5.4	7.2	3.5	6.6	4.0
S	.7	2.6	3.0	.8	.1	.0	232	7.2	12.3		6.4	6.5	7.1	5.7	8.9
SSW	.2	1.3	2.7	.4	.0	.0	148	4.6	13.4		4.8	5.8	3.7	8.5	5.3
SW	.5	3.1	2.0	.8	*	.0	209	6.5	11.8		6.6	7.2	6.5	7.5	6.4
WSW	.5	2.5	2.8	.9	.2	.0	220	6.8	13.4		5.9	6.5	7.2	5.7	8.9
W	.7	4.0	3.7	.9	.1	.0	299	9.3	12.5		10.4	10.1	9.2	10.4	8.7
WNW	.2	2.5	2.4	.5	.0	.0	179	5.6	12.2		5.0	5.8	5.8	7.5	5.6
NW	.6	3.6	3.2	.7	.1	*	265	8.2	12.1		8.9	4.3	8.3	9.4	6.4
NNW	.2	2.0	2.1	.2	.0	.0	144	4.5	11.7		4.4	5.8	4.4	7.5	4.4
VAR	.0	*	.0	.0	.0	.0	1	*	4.0		.1	.0	.0	.0	.0
CALM	3.6	1237	1268	327	23	2	117	3.6	.0		3.7	1.4	3.5	1.9	4.0
TOT OBS	357	38.5	39.5	10.2	.7	.1	3214	100.0	12.0		776	139	709	106	549
TOT PCT	11.1										100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-6	7-15	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD			00	03	06	09	12
N	3.1	5.6	1.2	.2	*	325	10.1	10.4			9.8	10.1	11.3	7.5	8.9
NE	2.6	4.6	2.1	.5	.0	316	9.8	12.4			9.5	15.1	9.6	8.5	9.5
E	1.9	5.4	2.7	.5	*	336	10.5	13.6			11.1	8.6	10.7	5.7	11.7
SE	2.8	6.1	3.9	.4	.0	423	13.2	13.5			13.3	12.9	12.8	14.2	11.3
S	2.6	5.7	3.3	.2	.0	380	11.8	12.8			11.2	12.2	10.7	14.2	14.2
SW	3.2	6.9	2.6	.6	*	429	13.3	12.6			12.5	13.7	13.7	13.2	15.3
W	3.0	8.4	3.1	.4	.0	478	14.9	12.4			15.5	15.8	15.0	17.9	14.4
NW	2.9	7.0	2.6	.2	*	409	12.7	11.9			13.3	10.1	12.7	17.0	10.7
VAR	*	.0	.0	.0	.0	1	*	4.0			.1	.0	.0	.0	.0
CALM	3.6	1595	688	99	4	117	3.6	.0			3.7	1.4	3.5	1.9	4.0
TOT OBS	828	49.6	21.4	3.1	.1	3214	100.0	12.0			776	139	709	106	549
TOT PCT	25.8										100.0	100.0	100.0	100.0	100.0

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TABLE 4

HOUR	PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)									
	1-3		4-10		11-21		22-33		WIND SPEED (KNOTS)	
	48+	48+	48+	48+	48+	48+	48+	48+	48+	48+
0003	7.9	38.8	38.7	10.3	.8	.1	3.4	12.1	100.0	914
0609	9.1	37.4	39.4	9.9	.7	.1	3.3	11.9	100.0	815
1215	5.6	40.7	39.1	10.8	.4	.0	3.4	12.1	100.0	676
1821	6.9	37.3	40.7	9.8	.9	.0	4.5	12.0	100.0	808
TOT	240	1236	1268	327	23	2	117	12.0		3213
PCT	7.5	38.5	39.5	10.2	.7	.1	3.6		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION					TOTAL OBS	MEAN CLOUD COVER
	0-2	3-4	5-7	8 & OBS	CD		
N	.2	.2	1.3	4.1	121	7.2	
NNE	.4	.1	1.1	3.4	104	7.0	
NE	.1	.1	1.1	3.8	106	7.5	
ENE	.1	.0	.8	3.4	90	7.5	
E	.2	*	1.0	5.2	133	7.5	
ESE	.1	.0	.9	3.2	87	7.5	
SE	.1	.1	1.9	5.8	167	7.4	
SSE	.1	.1	.6	3.8	96	7.5	
S	.2	.1	1.1	6.3	160	7.5	
SSW	.1	.1	1.1	3.5	101	7.4	
SW	.1	.1	1.5	4.4	128	7.3	
WSW	.1	.2	1.4	5.7	155	7.5	
W	.3	.7	2.1	6.6	202	7.2	
WNW	.3	.4	.9	3.7	109	7.0	
NW	.3	.2	1.3	4.9	140	7.3	
NNW	.4	*	.9	3.2	93	7.1	
VAR	.0	.0	.0	*	1	8.0	
CALM	*	.2	.5	3.2	81	7.6	
TOT OBS	70	60	405	1539	2074	7.4	
TOT PCT	3.4	2.9	19.5	74.2	100.0		

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

WIND DIR	AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION									
	000	150	300	630	1000	2000	3500	5000	6500	8000+
N	.9	.0	.3	1.1	1.4	.9	.*	.*	.*	.0
NNE	.4	.0	.1	.8	1.8	1.0	.0	.*	.*	.0
NE	.8	.*	.1	.6	1.9	1.0	.2	.1	.0	.0
ENE	.6	.0	.3	.6	1.5	.5	.1	.0	.1	.1
E	.8	.*	.2	1.2	2.2	1.1	.2	.0	.0	.0
ESE	.6	.*	.2	1.0	1.4	.3	.1	.*	.0	.*
SE	1.5	.*	.3	1.4	2.2	1.4	.2	.*	.0	.1
SSE	.9	.0	.2	1.0	1.4	.4	.*	.*	.0	.*
S	1.5	.2	.5	1.5	1.4	1.4	.2	.*	.0	.*
SSW	.6	.0	.3	1.2	1.6	.4	.1	.*	.0	.5
SW	1.0	.1	.2	1.0	1.9	1.0	.3	.*	.0	.7
WSW	.7	.*	.4	1.4	2.3	1.2	.3	.1	.0	.0
W	.8	.0	.3	1.7	3.9	1.3	.1	.0	.1	.0
WNW	.4	.0	.2	1.1	1.1	1.1	.3	.1	.0	.0
NW	.8	.*	.4	1.1	1.8	1.2	.2	.0	.0	.0
NNW	.5	.1	.3	.8	1.1	.7	.1	.0	.0	.0
VAR	.0	.0	.0	.*	.0	.0	.0	.0	.0	.0
CALM	.9	.1	.1	.7	.8	.7	.0	.*	.1	.3
TOT OBS	287	17	97	377	614	322	56	15	13	265
TOT PCT	13.8	.8	4.7	18.2	29.6	15.5	2.7	.7	.6	12.8

TABLE 7									
CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)									
CEILING (FEET)	= OR >10	= OR >5	= OR >2	VSBY (NM) = OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0	
= OR >6500	.9	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2
= OR >5000	1.3	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9
= OR >3500	2.6	4.1	4.5	4.6	4.7	4.7	4.7	4.7	4.7
= OR >2000	10.3	17.7	19.4	20.1	20.1	20.1	20.1	20.1	20.1
= OR >1000	22.3	40.7	46.9	49.2	49.6	49.7	49.8	49.8	49.8
= OR >600	28.2	52.5	63.0	66.5	67.3	67.7	67.9	67.9	67.9
= OR >300	29.8	55.8	66.8	70.8	71.8	72.3	72.5	72.5	72.5
= OR >150	29.9	55.9	67.3	71.4	72.5	73.0	73.3	73.4	73.4
= CR > 0	30.0	57.0	69.7	75.4	78.8	82.9	86.7	87.2	87.2
TOTAL	625	1186	1450	1569	1639	1725	1804	1814	1814

TOTAL NUMBER OF OBS: 2080 PCT FREQ NH <5/8: 12.8

TABLE 7A									
PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)									
0	1	2	3	4	5	6	7	8	TOTAL OBS
2.1	2.3	2.9	3.0	3.2	3.2	9.0	12.0	49.8	12.5 2263

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NF	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.1	.1	.1	.1	.2	.1	.1	.1	.3	.1	.2	.1	.2	.0	*	*	.0	.0	51	2.0
NO PCP	.2	.1	.2	.1	.2	.1	.3	.2	.3	*	*	.3	.3	.1	.2	.1	.0	.2	80	3.1
TOTAL	7	4	7	6	8	5	20	6	15	9	5	10	13	2	7	3	0	4	131	5.0
PCP	.1	.1	.1	.1	.2	.4	.1	.2	.4	.0	.2	.0	.1	*	.0	*	.0	.0	61	2.3
NO PCP	.2	.3	.3	.3	.3	.1	.6	.2	.5	.2	.3	.2	.5	.3	.3	.1	.0	.0	124	4.8
TOTAL	7	8	13	17	16	13	19	5	24	5	12	5	14	8	7	3	0	2	185	7.1
PCP	.1	.1	.3	.4	.5	.5	.6	.2	.3	.2	.2	.2	.2	*	.4	.2	.0	.0	117	4.5
NO PCP	.3	.5	.5	.2	.7	.5	1.0	.5	.8	.6	.6	.6	.9	.6	.7	.1	.0	.4	239	9.2
TOTAL	11	15	21	17	31	25	41	18	29	19	22	19	28	17	28	9	0	10	356	13.7
PCP	.2	.2	.6	.3	.5	.3	.3	.3	.4	.3	.5	.4	.3	.2	.2	.2	.0	.2	140	5.4
NO PCP	1.7	1.0	1.0	.9	1.6	.9	1.6	1.1	1.7	1.7	1.7	2.4	2.8	1.7	1.8	1.1	.0	.7	655	25.2
TOTAL	49	31	41	32	54	32	50	44	55	57	57	73	83	49	52	34	0	22	795	30.6
PCP	*	.1	.1	*	.1	.1	.1	*	.3	.1	.1	.2	.2	.1	.3	.1	.0	*	47	1.8
NO PCP	1.9	1.8	1.6	1.2	1.7	1.0	2.0	1.5	1.7	2.2	2.2	2.5	3.6	1.9	2.8	2.0	*	1.6	836	32.2
TOTAL	51	50	44	32	46	29	54	41	51	59	59	69	99	52	81	55	1	42	883	34.0
TOTAL PCT	145 5.6	115 4.4	138 5.3	111 4.3	171 6.6	116 4.5	215 8.3	123 4.7	200 7.7	167 6.4	186 7.2	253 9.7	253 9.7	138 5.3	192 7.4	113 4.3	1	94 3.6	2598 100.0	

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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.2	.1	.2	.0	.1	.1	.2	.0	.1	.0	*	.0	.2	.1	*	.1	.0	.4	53	1.7
	4-10	.3	*	.3	.4	.5	.2	.2	.3	.3	*	.2	.2	.3	.2	.4	.1	.0		122	3.9
	11-21	.2	.2	.1	*	.1	.1	.4	.3	.4	.2	.2	.1	.2	*	.1	.1	.0		84	2.7
	22+	.1	.0	.0	.0	.0	*	.3	.1	.1	.1	.0	.1	.0	.1	.0	*	.0		22	.7
	TOTAL	21	8	16	15	22	13	32	23	27	9	13	11	21	10	17	9	0	14	281	8.9
1/2<1	0-3	.0	.0	.1	.0	.0	*	.0	*	*	.0	.1	.0	.0	*	.0	.0	.0	.1	12	.4
	4-10	.1	.1	.1	*	.1	*	.2	*	.1	.1	.1	.1	.3	.1	.1	.1	.0		50	1.6
	11-21	.1	.1	.0	.1	.2	.1	.3	.2	.2	.1	*	.1	.1	*	.1	.1	.0		59	1.9
	22+	*	.0	*	.1	*	.0	.2	.0	.1	.0	*	.1	.1	.0	.1	.0	.0		21	.7
	TOTAL	7	4	7	8	9	5	20	9	15	6	7	10	13	4	8	6	0	4	142	4.5
1<2	0-3	.0	.0	*	.0	.0	.0	.0	.0	*	.0	*	*	.0	.0	.0	.0	.0	.1	6	.2
	4-10	.2	.1	.2	.2	.2	.1	.3	.2	.1	.0	.2	.1	.3	.2	.2	.1	.0		81	2.6
	11-21	.1	.1	.1	.3	.3	.2	.3	.1	.5	.1	.1	.1	.2	.1	.1	.1	.0		91	2.9
	22+	.0	.0	.1	*	.1	.1	.1	.1	.2	*	.1	.0	*	.1	.1	.0	.0		29	.9
	TOTAL	8	8	14	19	17	13	21	14	24	5	12	8	15	13	10	4	0	2	207	6.6
2<5	0-3	.1	*	.1	.0	.1	.0	.1	*	.1	.1	.1	.1	*	.0	.1	.0	.0	.4	41	1.3
	4-10	.2	.2	.3	.2	.3	.2	.4	.1	.3	.2	.4	.2	.2	.3	.4	.1	.0		123	3.9
	11-21	.1	.3	.3	.2	.5	.3	.7	.3	.5	.4	.2	.3	.5	.3	.5	.2	.0		170	5.4
	22+	.1	.0	.1	.2	.2	.3	.3	.1	.2	.0	.1	.1	.2	.0	.1	*	.0		65	2.1
	TOTAL	12	15	25	17	35	29	46	15	32	19	26	21	32	18	34	10	0	13	399	12.6
5<10	0-3	.3	*	.3	.1	.1	*	.1	.1	.2	*	.0	.2	.3	*	.1	*	.0	1.0	92	2.9
	4-10	.9	.7	.8	.3	.8	.2	.4	.7	.7	.3	1.0	.9	1.5	1.0	1.0	.7	.0		379	12.0
	11-21	.6	.4	.7	.5	.9	.8	.9	.6	1.0	.1	.8	1.3	1.2	1.0	1.0	.6	.0		417	13.2
	22+	.2	.1	.1	.3	.3	.2	.4	.2	.2	.1	.3	.4	.3	.1	.4	*	.0		114	3.6
	TOTAL	61	37	59	40	62	38	61	51	64	49	67	86	103	67	80	45	0	32	1002	31.8
10+	0-3	.3	.3	.2	.0	.2	.0	.3	.1	.3	.1	.3	.2	.2	.1	.3	.1	.0	1.5	135	4.3
	4-10	1.2	.9	.7	.6	.7	.6	.9	.4	1.2	.6	1.1	1.1	1.4	.7	1.6	.9	*		459	14.5
	11-21	.8	.6	.8	.3	.8	.5	1.0	.7	.5	.9	.8	1.0	1.6	1.0	1.5	1.1	.0		436	13.8
	22+	.1	.2	.1	.3	.1	*	.2	.1	.1	.2	.3	.2	.3	.3	.2	.1	.0		94	3.0
	TOTAL	74	62	56	38	53	35	76	41	67	55	78	82	113	65	112	69	1	47	1124	35.6
	TOTAL	183	134	177	137	198	133	256	153	229	143	203	218	297	177	261	143	1	112	3155	100.0
	PCT	5.8	4.2	5.6	4.3	6.3	4.2	8.1	4.8	7.3	4.5	6.4	6.9	9.4	5.6	8.3	4.5	*	3.5	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH > 4/8), AND  
OCCURRENCE OF NH < 5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL NH < 5/8 ANY HGT	TOTAL OBS
00003	10.4	1.1	3.7	16.0	31.6	13.7	3.2	.7	.4	1.1	81.7	569
06009	15.8	.5	4.7	17.1	27.6	13.8	2.5	.5	.9	.5	84.0	551
12015	16.8	.8	4.0	19.5	26.7	15.3	2.5	.2	.8	.2	87.0	476
18021	12.5	.8	5.8	18.9	30.0	17.9	2.6	1.3	.4	.2	90.4	530
TOT	292	17	97	378	618	322	58	15	13	11	1821	2126
PCT	13.7	.8	4.6	17.8	29.1	15.1	2.7	.7	.6	.5	85.7	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	8.0	2.5	4.7	11.3	30.5	42.9	550
06009	9.6	5.0	5.9	12.4	27.3	39.7	539
12015	9.8	3.8	6.4	16.1	32.7	31.2	471
18021	6.9	3.1	7.3	14.4	31.3	36.9	520
TOT	178	75	126	280	632	769	2080
PCT	8.6	3.6	6.1	13.5	30.4	37.9	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET, NH > 4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH < 5/8 AND 5+	TOTAL OBS
00003	10.9	17.6	41.6	44.5	13.8	550
06009	16.3	23.9	48.8	38.4	12.8	539
12015	17.0	22.9	52.4	36.7	10.8	471
18021	12.5	20.2	49.8	42.7	7.5	520
TOT	291	439	998	847	235	2080
PCT	14.0	21.1	48.0	40.7	11.3	100.0



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TABLE 13

TEMP F	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP										TOTAL OBS	PCT FREQ
	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100				
60/64	.0	.0	.0	.0	.1	.1	.0	.0			2	.1
55/59	.0	.0	.0	.1	.1	.6	.4	.4			27	1.5
50/54	.0	.0	.0	.2	1.2	2.6	3.9	1.8			174	9.7
45/49	.0	.0	.0	.6	1.2	7.5	18.9	20.9			880	49.1
40/44	.0	.0	.0	.0	.6	2.9	9.7	25.1			687	38.4
35/39	.0	.0	.0	.0	.0	.2	.2	.8			21	1.2
TOTAL	0	0	0	16	56	248	593	878			1791	100.0
PCT	.0	.0	.0	.9	3.1	13.8	33.1	49.0				

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP											VAR	CALM
N	NE	E	SE	S	SW	W	NW					
.0	.0	.1	.0	.0	.0	.0	.0				.0	.0
.1	.2	.2	.4	.2	.1	.1	.1				.0	.2
.9	1.2	1.4	1.2	.9	1.1	1.2	1.3				.0	.4
4.8	6.6	5.0	7.1	6.1	6.1	6.5	5.0				.0	2.1
4.5	3.2	3.3	4.5	3.7	5.5	5.2	6.7				.1	1.6
.3	.0	.0	.1	.2	.1	.2	.3				.0	.0
190	201	179	239	198	231	233	241				.1	78
10.6	11.2	10.0	13.3	11.1	12.9	13.0	13.5				.1	4.4

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR											TOTAL OBS
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN			
00003	61	57	54	46	41	39	37	46.5			918
06009	60	55	51	45	41	38	36	45.5			811
12015	59	51	48	44	39	37	35	43.9			677
18021	57	54	50	45	40	39	36	44.6			806
TOT	61	55	51	45	41	38	35	45.2			3212

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR											TOTAL OBS
HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN				
00003	.0	1.7	5.0	19.1	36.6	37.7	86				544
06009	.0	.2	2.1	12.6	34.7	50.3	88				475
12015	.0	.6	1.3	11.0	28.1	59.0	89				310
18021	.0	1.1	3.2	10.9	30.4	54.5	89				470
TOT	0	17	56	249	594	883	88				1799

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	33	36	37	40	41	44	45	48	49	52	53	56	57	61	TOT	W FOG	WD FOG
14/16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	*	*	*	*	3	.0	.1
11/13	.0	.0	.0	.0	.0	.0	.0	.0	.1	.3	.3	.3	.2	*	15	.1	.6
9/10	.0	.0	.0	.0	.0	.0	.2	.7	.7	.3	.3	.3	.1	.0	29	.3	1.0
7/8	.0	.0	.0	.0	.1	.1	.6	1.1	1.1	.7	.3	.1	*	.0	47	.4	1.8
6	.0	.0	.0	.0	.1	.1	.7	.7	.7	.1	.1	.0	.0	.0	37	.4	1.3
5	.0	.0	.1	.1	.3	.3	2.8	1.3	1.3	.2	.2	.0	.0	.0	106	1.1	3.7
4	.0	.0	.1	.1	1.1	1.1	4.8	1.2	1.2	*	*	.0	.0	.0	162	1.3	6.1
3	.0	.0	*	1.1	1.1	1.1	3.7	.5	.5	.1	.1	.0	.0	.0	120	1.0	4.4
2	.0	.0	.1	4.0	9.1	1.0	1.0	.4	.4	*	*	.0	.0	.0	318	3.1	11.3
1	.0	.0	.2	4.3	5.4	.4	.4	.5	.5	.0	.0	.0	.0	.0	228	1.4	8.9
0	*	1.1	11.8	10.2	.5	.3	.3	.3	.3	*	*	.0	.0	.0	525	3.3	20.5
-1	.0	.0	.4	5.2	2.4	.6	.6	.0	.0	.0	.0	.0	.0	.0	183	1.0	7.2
-2	.0	.0	.8	5.5	3.1	.7	.7	.1	.1	.0	.0	.0	.0	.0	210	1.1	8.4
-3	.0	.0	.6	2.7	.6	.6	.6	.0	.0	.0	.0	.0	.0	.0	85	.5	3.4
-4	.0	.0	.5	1.7	.7	.7	.7	.1	.1	.0	.0	.0	.0	.0	67	.5	2.5
-5	*	.3	.3	.5	.9	.9	.9	.0	.0	.0	.0	.0	.0	.0	39	.3	1.5
-6	.0	.0	.3	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	19	.1	.7
-7/-8	.0	.2	.2	.5	.2	.2	.2	.0	.0	.0	.0	.0	.0	.0	18	*	.8
-9/-10	.0	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	*	.1
TOTAL	.1	2	105	875	1011	177	33	9	2	2214	350	1864			100.0	15.8	84.2
PCT			4.7	39.5	45.7	8.0	1.5	.4	.1								

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N						NE						TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	1-3	4-10	11-21	22-33	34-47	48+			
<1	.3	.7	.0	.0	.0	.0	.0	1.1	.0	.0	.0	.0	7	.0	8
1-2	.1	2.3	1.4	.0	.0	.0	.0	1.3	1.3	.0	.0	.0	27	.0	18
3-4	.1	2.0	1.5	.0	.0	.0	.0	1.0	1.8	.0	.0	.0	27	.0	20
5-6	.0	.3	1.3	.1	.0	.0	.0	.4	1.5	.1	.0	.0	12	.0	15
7	.0	.0	.4	.0	.0	.0	.0	.0	.6	.4	.0	.0	3	.0	7
8-9	.0	.0	.3	.4	.1	.0	.0	.0	.0	.1	.1	.0	6	.0	2
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	0	.0	1
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	0	.0	1
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	4	37	35	5	1	0	0	27	37	6	2	0	82	0	72
PCT	.6	5.2	4.9	.7	.1	.0	.0	3.8	5.2	.8	.3	.0	11.5	.0	10.1

HGT	E						SE						TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	1-3	4-10	11-21	22-33	34-47	48+			
<1	.1	.7	.0	.0	.0	.0	.3	1.1	.0	.0	.0	.0	6	.0	10
1-2	.1	2.5	1.4	.0	.0	.0	.3	1.0	1.7	.0	.0	.0	29	.0	21
3-4	.0	.8	1.8	.1	.0	.0	.0	1.4	1.8	.3	.0	.0	20	.0	25
5-6	.0	.6	1.4	.3	.1	.0	.0	.3	2.5	.8	.0	.0	17	.0	26
7	.0	.0	.6	.4	.0	.0	.0	.0	1.0	1.3	.0	.0	7	.0	16
8-9	.0	.0	.4	.3	.0	.0	.0	.0	.0	.6	.0	.0	5	.0	4
10-11	.0	.1	.0	.1	.0	.0	.0	.0	.1	.3	.0	.0	2	.0	3
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	1	.0	1
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	2	34	40	10	1	0	4	27	51	24	0	0	87	0	106
PCT	.3	4.8	5.6	1.4	.1	.0	.6	3.8	7.2	3.4	.0	.0	12.3	.0	14.9

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S							SW							TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+		
<1	.1	.7	.0	.0	.0	.0	6	.3	.7	.0	.0	.0	.0	7	
1-2	.7	1.7	.8	.0	.0	.0	23	.3	2.7	.4	.0	.0	.0	24	
3-4	.0	.8	1.4	.3	.0	.0	18	.3	.7	1.0	.0	.0	.0	14	
5-6	.0	.1	2.3	.0	.0	.0	17	.0	.4	1.4	.1	.0	.0	14	
7	.0	.3	2.3	.1	.0	.0	19	.0	.0	.7	.1	.0	.0	6	
8-9	.0	.1	.3	.1	.0	.0	4	.0	.0	.6	.0	.0	.0	4	
10-11	.0	.0	.0	.1	.0	.0	1	.0	.0	.0	.3	.0	.0	2	
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
13-16	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
17-19	.0	.0	.0	.0	.1	.0	1	.0	.0	.0	.0	.0	.0	0	
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
TOTAL	6	27	50	5	1	0	89	6	32	29	4	0	0	71	
PCT	.8	3.8	7.0	.7	.1	.0	12.5	.8	4.5	4.1	.6	.0	.0	10.0	

HGT	W							NW							TOTAL	GRAND TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+			
<1	.4	1.1	.0	.0	.0	.0	11	.3	.4	.0	.0	.0	.0	5	60	
1-2	.3	2.5	1.8	.0	.0	.0	33	.0	2.3	2.1	.0	.0	.0	31	206	
3-4	.3	2.4	2.7	.1	.0	.0	39	.0	2.0	2.3	.0	.0	.0	30	193	
5-6	.1	1.0	1.3	.4	.0	.0	20	.0	.3	1.0	.1	.0	.0	10	131	
7	.0	.1	.4	.1	.0	.0	5	.0	.0	.7	.3	.0	.0	7	70	
8-9	.0	.0	.3	.3	.0	.0	4	.0	.0	.1	.4	.0	.0	4	33	
10-11	.0	.0	.0	.1	.0	.0	1	.0	.0	.0	.1	.0	.0	1	10	
12	.0	.0	.0	.0	.0	.0	1	.0	.0	.0	.1	.0	.0	1	3	
13-16	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	3	
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	1	
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0	
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0	
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0	
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0	
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0	
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0	
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0	
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0	
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0	
TOTAL	8	51	46	9	0	0	114	2	35	44	8	0	0	89	710	
PCT	1.1	7.2	6.5	1.3	.0	.0	16.1	.3	4.9	6.2	1.1	.0	.0	12.5	100.0	

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1969

JUNE

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)								TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+			
<1	6.5	6.3	.0	.0	.0	.0			96
1-2	1.9	15.4	10.4	.0	.0	.0			207
3-4	.8	10.5	13.6	.9	.0	.0			194
5-6	.1	3.2	12.0	2.0	.1	.0			131
7	.1	.4	6.3	2.7	.0	.0			71
8-9	.0	.1	1.9	2.1	.3	.0			33
10-11	.0	.1	.1	1.1	.0	.0			10
12	.0	.0	.0	.3	.1	.0			3
13-16	.0	.0	.0	.4	.0	.0			3
17-19	.0	.0	.0	.0	.1	.0			1
20-22	.0	.0	.0	.0	.0	.0			0
23-25	.0	.0	.0	.0	.0	.0			0
26-32	.0	.0	.0	.0	.0	.0			0
33-40	.0	.0	.0	.0	.0	.0			0
41-48	.0	.0	.0	.0	.0	.0			0
49-60	.0	.0	.0	.0	.0	.0			0
61-70	.0	.0	.0	.0	.0	.0			0
71-86	.0	.0	.0	.0	.0	.0			0
87+	.0	.0	.0	.0	.0	.0			0
TOTAL	71	270	332	71	5	0			749
PCT	9.5	35.0	44.3	9.5	.7	.0			100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+ TOTAL	MEAN HGT	
<6	2.8	16.9	14.6	6.7	1.4	1.3	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	374	3
6-7	.0	2.2	7.9	8.7	5.2	1.4	.1	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	219	4
8-9	.0	.4	3.0	3.2	4.6	2.5	1.1	.2	.6	.1	.2	.0	.0	.0	.0	.0	.0	.0	.0	134	6
10-11	.0	.1	.7	.2	.7	.8	.5	.4	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	32	7
12-13	.0	.0	.0	.1	.0	.4	.1	.0	.2	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	8	10
>13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
INDET	9.2	.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	80	0
TOTAL	102	166	223	162	101	54	18	6	10	2	3	0	0	0	0	0	0	0	0	847	4
PCT	12.0	19.6	26.3	19.1	11.9	6.4	2.1	.7	1.2	.2	.4	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

JULY

PERIOD: (PRIMARY) 1944-1969  
(OVER-ALL) 1899-1969

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	PRECIPITATION TYPE				HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
			DRZL	FRZG	SNOW	OTHER FRZN PCPN					FOG	SMOKE	DUST	NO SIG WEA	
N	.1	*	.2	.0	.0	.0	.0	.0	10	.0	1.0	.1	.0	2.3	111
NNE	.1	.0	.2	.0	.0	.0	.0	.3	7	.0	.5	.1	.0	1.3	63
NE	.2	.1	.1	.0	.0	.0	.0	.2	11	.0	.8	.0	.0	2.2	99
ENE	.3	.1	.4	.0	.0	.0	.0	.4	22	.0	.0	.0	.0	1.6	78
E	.4	.0	.7	.0	.0	.0	.0	.7	34	*	.3	.0	.0	2.6	130
ESE	.7	.0	.5	.0	.0	.0	.0	1.1	34	.0	.6	.0	.0	1.2	93
SE	.7	.0	.7	.0	.0	.0	.0	1.1	41	.0	.8	.0	.0	2.4	163
SSE	.5	.0	.5	.0	.0	.0	.0	1.4	27	.0	1.5	.2	.0	2.2	139
S	.8	.0	.5	.0	.0	.0	.0	.9	54	.0	3.1	*	.0	3.4	251
SSW	.6	*	1.0	.0	.0	.0	.0	1.8	43	.0	.0	.0	.0	3.0	194
SW	.9	*	.8	.0	.0	.0	.0	1.4	58	.0	2.0	.1	.0	5.0	329
WSW	.6	*	1.0	.0	.0	.0	.0	1.9	48	.0	3.9	.1	.0	5.9	303
W	.6	.1	1.2	.0	.0	.0	.0	1.6	55	.0	2.4	.1	*	8.4	428
WNW	.1	.1	.4	.0	.0	.0	.0	1.8	18	.0	3.7	.2	.0	4.7	202
NW	.2	*	.1	.0	.0	.0	.0	.6	11	.0	1.3	.1	.0	3.9	199
NNW	.1	*	.1	.0	.0	.0	.0	.4	6	.0	2.2	.2	.0	2.9	117
VAR	.0	.0	.0	.0	.0	.0	.0	.2	0	.0	.8	.0	.0	.1	2
CALM	.1	.0	.0	.0	.0	.0	.0	.0	8	.0	.0	.0	.0	2.4	119
TOT OBS	203	15	274	0	0	0	0	.3	487	.0	1.3	.0	.0	1672	3020
TOT PCT	6.7	.5	9.1	.0	.0	.0	.0	16.1		*	27.4	1.1	.1	55.4	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	PRECIPITATION TYPE				HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
			DRZL	FRZG	SNOW	OTHER FRZN PCPN					FOG	SMOKE	DUST	NO SIG WEA	
00003	5.2	.9	7.3	.0	.0	.0	.0	13.1	108	.1	25.8	1.6	.1	59.2	822
06009	5.5	.3	8.0	.0	.0	.0	.3	13.9	104	.0	27.5	1.1	.0	57.5	746
12015	7.4	.3	11.3	.0	.0	.0	.0	18.6	134	.0	22.9	.6	.1	57.7	719
18021	9.1	.5	10.1	.0	.0	.0	.0	19.4	147	.0	32.5	.9	.0	47.1	756
TOT	206	15	277	0	0	0	2	16.2	493	1	828	32	2	1687	3043
PCT	6.8	.5	9.1	.0	.0	.0	.1	16.2		*	27.2	1.1	.1	55.4	100.0

JULY

PERIOD: (PRIMARY) 1944-1969  
(OVER-ALL) 1899-1969

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)					
	0-3	4-10	11-21	22-33	34-47	00	03	06	09	12					15	18	21			
N	.6	1.8	1.0	.2	.0	.0	129	3.6	9.5	3.5	2.5	4.1	2.7	1.9	3.0	4.9	5.2			
NNE	.3	1.2	.6	.1	*	.0	84	2.4	10.3	2.8	3.3	2.3	2.7	2.0	3.0	2.0	1.7			
NE	.6	2.0	1.4	*	.0	.0	142	4.0	9.2	3.8	7.4	4.8	5.4	2.9	5.2	3.1	4.3			
ENE	.3	1.1	1.2	.2	.0	.0	99	2.8	11.7	3.3	.8	2.5	5.4	2.0	2.2	2.9	4.3			
E	.3	1.9	1.7	.3	.1	.0	152	4.3	12.0	5.0	2.5	4.4	3.6	4.6	2.2	4.0	1.7			
ESE	.3	1.2	1.4	.4	.0	.0	117	3.3	12.8	3.0	.0	3.3	2.7	3.7	4.5	3.5	3.5			
SE	.6	1.6	2.7	.6	*	.0	197	5.5	13.0	6.6	3.3	5.3	4.5	4.9	6.7	5.2	6.1			
SSE	.3	1.5	1.8	.6	.1	.0	156	4.4	13.5	4.1	2.5	3.7	11.6	3.2	4.5	5.0	7.8			
S	.4	2.8	3.6	1.3	.1	*	290	8.1	14.4	8.3	9.0	8.0	8.0	8.5	6.7	8.6	3.5			
SSW	.1	1.7	3.4	.7	.1	.0	214	6.0	14.8	5.0	1.6	6.7	8.0	6.0	8.2	6.3	6.1			
SW	.6	3.0	5.2	1.7	.2	.0	380	10.6	14.6	11.9	14.8	12.2	8.0	9.4	6.7	9.6	7.8			
WSW	.3	3.3	4.4	1.5	.2	.0	344	9.6	14.8	7.9	11.5	8.6	7.1	13.8	9.7	9.4	7.8			
W	.8	4.6	6.3	1.7	.1	.0	481	13.5	13.7	14.4	13.9	13.2	13.4	14.4	14.2	11.6	14.8			
WNW	.4	2.7	3.0	.6	*	.0	239	6.7	12.6	6.8	13.1	5.2	5.4	7.9	10.4	6.0	4.3			
NW	.6	2.8	2.9	.6	*	.0	249	7.0	11.8	7.0	9.0	6.1	8.0	6.0	6.0	7.4	13.0			
NNW	.2	1.8	1.7	.3	.0	.0	145	4.1	11.5	2.8	4.1	4.8	2.7	4.0	5.2	4.4	6.1			
VAR	.1	.0	.0	.0	.0	.0	2	.1	1.5	.0	.0	.1	.0	.0	.0	.1	.0			
CALM	4.3	1248	1511	385	32	1	152	4.3	.0	3.8	.8	4.6	.9	4.6	1.5	5.9	1.7			
TOT OBS	395	42.3	42.3	10.8	.9	*	3572	100.0	12.5	859	122	788	112	647	134	795	115			
TOT PCT	11.1	34.9	34.9	10.8	.9	*	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)								
	0-6	7-16	17-27	28-40	41+				00	03	06	09	12	15	18	21	
N	2.1	3.1	.8	.1	.0	213	6.0	9.8	6.3	5.7	6.3	5.4	3.9	6.0	6.9	7.0	
NE	2.4	3.2	1.1	.0	.0	241	6.7	10.2	7.1	8.2	7.4	10.7	4.9	7.5	6.0	8.7	
E	1.8	3.6	2.1	.1	.0	269	7.5	12.4	8.0	2.5	7.7	6.3	8.3	6.7	7.5	5.2	
SE	2.1	4.7	2.7	.4	*	353	9.9	13.2	10.7	5.7	9.0	16.1	8.2	11.2	10.2	13.9	
S	2.0	7.4	3.8	.9	*	504	14.1	14.5	13.3	10.7	14.7	16.1	14.5	14.9	14.8	9.6	
SW	3.4	9.0	6.8	1.0	.1	724	20.3	14.7	19.8	26.2	20.8	15.2	23.2	16.4	19.0	15.7	
W	3.4	10.6	5.3	.8	.0	720	20.2	13.3	21.2	27.0	18.4	18.8	22.3	24.6	17.6	19.1	
NW	2.7	6.3	1.9	.2	.0	394	11.0	11.7	9.8	13.1	10.9	10.7	10.0	11.2	11.8	19.1	
VAR	.1	.0	.0	.0	.0	2	.1	1.5	.0	.0	.1	.0	.0	.0	.1	.0	
CALM	4.3	1709	873	124	5	152	4.3	.0	3.8	.8	4.6	.9	4.6	1.5	5.9	1.7	
TOT OBS	861	47.8	24.4	3.5	.1	3572	100.0	12.5	859	122	788	112	647	134	795	115	
TOT PCT	24.1	47.8	24.4	3.5	.1	100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

JULY

PERIOD: (PRIMARY) 1944-1969  
(OVER-ALL) 1899-1969

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 4

HOUR	PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT,							PCT FREQ	TOTAL OBS
	1-3	4-10	11-21	22-33	34-47	48+	CALM		
00003	7.8	34.6	41.8	11.1	1.2	.0	3.5	12.5	100.0
06009	6.1	36.4	42.3	10.5	.7	.0	4.1	12.4	100.0
12015	4.0	34.8	44.6	11.3	1.3	.0	4.1	13.3	100.0
18021	8.6	34.1	41.0	10.3	.4	.1	5.4	12.0	100.0
TOT	241	1248	1511	395	32	1	152	12.5	3570
PCT	6.8	35.0	42.3	10.8	.9	*	4.3	100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION							MEAN CLOUD COVER
	0-2	3-4	5-7	8-6	OBSCD	TOTAL OBS		
N	.1	.2	.5	2.9	86	7.4		
NNE	.0	.1	.5	1.7	54	7.5		
NE	.2	.1	.3	2.6	77	7.3		
ENE	.0	.1	.3	2.3	63	7.7		
E	.0	*	.5	3.7	102	7.8		
ESE	.0	.0	.2	3.0	77	7.9		
SE	.1	.2	.5	4.2	119	7.6		
SSE	*	*	.4	4.1	109	7.7		
S	.1	.1	.8	7.3	198	7.7		
SSW	.1	.0	.6	6.4	169	7.8		
SW	.1	*	.9	8.8	236	7.8		
WSW	.1	.2	1.1	8.7	237	7.7		
W	.2	.1	2.0	11.8	335	7.7		
WNW	*	.1	1.3	5.6	167	7.6		
NW	*	.3	1.7	4.7	159	7.4		
NNW	.3	*	.9	2.8	97	7.2		
VAR	.0	*	.0	*	2	5.5		
CALM	*	*	.4	3.4	92	7.7		
TOT OBS	37	39	306	1997	2379	7.6		
TOT PCT	1.6	1.6	12.9	83.9	100.0			

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

WIND DIR	AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION														TOTAL OBS
	000	149	150	299	300	599	600	999	1000	2000	3500	5000	6500	8000+	
N	.5		*		.0		.7		.8	.7	.1	.0	*	*	86
NNE	.3		.0		.1		.3		.9	.3	.1	.0	.0	.0	54
NE	.3		*		.1		.5		1.1	.5	*	.0	*	*	77
ENE	.4		.1		.2		.4		1.1	.2	.1	.0	*	*	63
E	.8		.1		.2		.9		1.3	.5	.1	*	.0	.0	102
ESE	1.0		.2		.4		.6		.5	.3	.0	.0	.0	.0	77
SE	1.4		*		.2		.8		1.1	.7	.2	*	.0	.0	119
SSE	1.3		.0		.3		1.4		.8	.5	.0	.0	.0	.0	109
S	3.2		.2		.6		1.6		1.0	.8	.3	*	*	*	198
SSW	2.4		.3		.5		1.3		1.7	.4	.1	.1	.0	.0	169
SW	3.1		.3		.4		1.7		2.7	.9	.3	.0	.0	.0	236
WSW	1.7		.3		.8		2.3		2.7	1.3	.3	.1	.0	.0	237
W	2.9		.1		.5		2.7		3.8	2.2	.6	*	.0	.1	335
WNW	1.1		.0		.3		1.1		2.5	1.2	.3	.1	.0	.0	167
NW	1.2		.1		.3		.8		2.0	1.2	.3	.1	.0	.1	159
NNW	.4		*		.1		.7		1.3	.9	.2	.0	.0	.5	97
VAR	.0		.0		*		.0		.0	.0	.0	.0	.0	*	2
CALM	1.1		.0		.1		.5		1.1	.4	.1	.0	.1	.0	92
TOT OBS	547	36	120	436	18.3	5.0	26.1	13.2	3.1	.5	.3	.6	.8	205	2379
TOT PCT	23.0	1.5	5.0	18.3	7.6	2.0	10.8	3.7	1.1	3.1	0.8	1.1	0.3	8.6	100.0



JULY

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PERIOD: (PRIMARY) 1944-1969  
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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)									
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0		
= OR >6500	.3	.4	.5	.5	.5	.6	.6	.6		
= OR >5000	.7	.9	1.1	1.1	1.1	1.1	1.1	1.1	1.1	.6
= OR >3500	2.8	3.7	4.2	4.2	4.2	4.3	4.3	4.3	4.3	4.3
= OR >2000	9.2	14.8	16.8	17.2	17.3	17.5	17.6	17.6	17.6	17.6
= OR >1000	19.2	33.3	41.1	42.4	42.8	43.5	43.7	43.7	43.7	43.7
= OR >600	24.0	45.0	57.3	59.6	60.6	61.6	62.0	62.0	62.0	62.0
= OR >300	24.8	47.4	61.3	64.0	65.3	66.5	66.9	66.9	66.9	66.9
= OR >150	24.9	47.9	62.2	64.9	66.4	68.0	68.4	68.4	68.4	68.4
= OR >0	25.1	49.3	66.0	71.0	75.4	83.3	90.4	91.3	91.3	91.3
TOTAL	597	1171	1568	1686	1791	1979	2147	2169	2169	2169

TOTAL NUMBER OF OBS: 2375 PCT FREQ NH <5/8: 8.7

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

										TOTAL
										OBS
C	1	2	3	4	5	6	7	8	OBSCD	2482
.8	1.2	2.5	2.0	2.0	2.9	6.6	8.2	52.7	21.0	2482

JULY

PERIOD: (PRIMARY) 1944-1969  
(OVER-ALL) 1899-1969

AREA 0008 DUTCH HARBOR  
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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.0	*	.1	.1	.0	.2	.1	.2	.0	.2	.1	.2	*	.0	*	.0	.0	36	1.2
NO PCP	.4	.2	.2	.3	.5	.8	.8	2.0	1.2	1.8	1.3	1.8	.6	1.0	.4	.0	.8	436	14.5
TOTAL	12	6	10	12	14	30	27	66	35	61	42	60	18	30	13	0	24	472	15.7
PCP	*	.0	.1	.2	*	.2	*	.2	.2	.2	.1	.2	.0	*	.0	.0	.0	43	1.4
NO PCP	.2	.0	.1	.1	.2	.2	.3	.5	.3	.5	.3	.5	.4	.3	.1	.0	.1	126	4.2
TOTAL	7	0	4	8	6	12	9	20	15	20	11	21	11	10	3	0	3	169	5.6
PCP	.1	.1	.2	.2	.1	.1	.2	.1	.3	.3	.2	.2	.1	*	.0	.0	.0	65	2.2
NO PCP	.2	.1	*	.1	*	.3	.1	.4	.5	.6	.3	.6	.1	.3	.1	.0	.1	117	3.9
TOTAL	9	5	8	10	4	12	7	14	25	27	15	22	6	10	2	0	3	182	6.1
PCP	.2	.1	.1	.6	.6	.4	.3	.6	.4	.5	.4	.6	.2	*	.1	.0	.2	165	5.5
NO PCP	.4	.4	.3	.4	.1	.6	.5	.8	.8	1.9	1.4	1.8	.6	.7	.4	.0	.4	353	11.7
TOTAL	17	13	11	30	22	30	23	43	37	72	54	74	25	21	14	0	19	518	17.2
PCP	.0	.1	.2	.1	.4	.4	.2	.4	.5	.5	.7	.5	.2	.2	.1	.0	.1	141	4.7
NO PCP	.7	.5	.5	1.0	.7	.8	1.3	1.4	1.1	2.4	2.7	3.8	2.0	1.6	.9	.0	.8	699	23.2
TOTAL	20	18	19	32	33	34	47	56	49	88	103	127	66	54	30	0	26	840	27.9
PCP	*	.0	.1	*	*	.1	.1	.3	*	.1	.1	.2	*	.1	.0	.0	.0	34	1.1
NO PCP	1.5	.6	.9	1.2	.4	1.4	.7	1.4	1.0	1.8	2.4	3.9	2.5	2.4	1.8	.1	1.5	792	26.3
TOTAL	46	19	26	37	14	45	25	51	32	57	74	124	76	73	55	2	44	826	27.5
TOTAL	111	63	78	129	93	163	138	250	193	325	299	428	202	198	117	2	119	3007	100.0
PCT	3.7	2.1	3.3	4.3	3.1	5.4	4.6	8.3	6.4	10.8	9.9	14.2	6.7	6.6	3.9	.1	4.0	100.0	

JULY

PERIOD: (PRIMARY) 1944-1969  
(OVER-ALL) 1899-1969

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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	C	LM	TOTAL	PCT
<1/2	0-3	.1	.1	.0	*	*	.0	*	*	.1	*	.1	.1	*	.1	.1	*	.0	.7	.7	57	1.6
	4-10	.2	.1	.3	.1	.1	.3	.3	.3	.5	.3	.7	.5	.8	.2	.5	.1	.0	.0	.0	192	5.4
	11-21	*	*	.1	.1	.3	.2	.6	.4	.9	.6	.7	.6	.7	.2	.3	.3	.0	.0	.0	204	5.8
	22+	.0	.0	.0	*	.0	.0	.1	.1	.4	.1	.3	.1	.2	*	*	.0	.0	.0	.0	45	1.3
	TOTAL	12	8	11	10	12	17	35	28	69	36	65	42	63	18	33	13	0	26	26	498	14.1
1/2<1	0-3	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	*	.0	*	*	.0	.0	.1	.1	10	.3
	4-10	.1	.0	.1	.1	.1	.0	.1	.1	.2	*	.1	.2	.2	.2	.1	.1	.0	.0	.0	58	1.6
	11-21	.1	.0	.1	*	.1	.1	.2	.1	.3	.3	.5	.1	.4	.1	.1	*	.0	.0	.0	90	2.5
	22+	.0	.0	.0	.0	.0	*	.0	*	.1	.1	.1	*	.1	*	.1	.0	.0	.0	.0	17	.5
	TOTAL	7	0	10	4	8	6	12	10	21	15	21	11	22	12	10	3	0	3	3	175	5.0
1<2	0-3	*	.0	.0	.0	*	*	.0	*	.0	.0	*	.0	.1	.0	*	.0	.0	.1	.1	12	.3
	4-10	.1	*	.1	.1	.1	.0	.1	.1	.1	.2	.2	.1	.3	.1	.1	*	.0	.0	.0	63	1.8
	11-21	.1	.1	*	.1	.1	.1	.2	.1	.3	.4	.5	.3	.3	.2	.2	*	.0	.0	.0	101	2.9
	22+	.0	*	.0	*	.1	.1	*	*	.1	.1	.1	.1	.1	*	.1	.0	.0	.0	.0	26	.7
	TOTAL	10	5	4	8	11	6	13	7	16	26	30	16	27	6	11	2	0	4	4	202	5.7
2<5	0-3	.2	.1	.0	.1	.1	.1	.2	.0	.1	.0	.1	.0	.1	.1	.1	.1	.0	.6	.6	61	1.7
	4-10	.2	.3	.4	.1	.4	.2	.2	.3	.4	.3	.5	.4	.6	.4	.3	.3	.0	.0	.0	187	5.3
	11-21	.1	.1	.1	.2	.3	.4	.4	.3	.6	.7	1.1	.7	1.0	.3	.3	.2	.0	.0	.0	238	6.7
	22+	.1	*	*	*	.1	.1	.1	.1	.3	.2	.5	.6	.4	.1	.1	.1	.0	.0	.0	103	2.9
	TOTAL	19	17	20	15	33	28	35	28	47	38	79	58	77	28	26	19	0	22	22	589	16.7
5<10	0-3	.1	.1	.3	.1	.1	.2	.2	.2	.1	*	.1	.1	.2	.2	.2	.0	.0	.9	.9	109	3.1
	4-10	.4	.3	.4	.3	.6	.4	.4	.3	.8	.5	.7	.9	1.3	.8	.6	.4	.0	.0	.0	317	9.0
	11-21	.1	.2	.6	.3	.3	.4	.5	.7	.7	.7	1.5	1.8	1.9	.9	.8	.5	.0	.0	.0	426	12.1
	22+	*	.1	.0	.1	.1	.1	.2	.2	.3	.3	.6	.6	.7	.1	.2	.1	.0	.0	.0	129	3.7
	TOTAL	22	23	45	24	40	39	45	50	66	54	102	121	144	74	65	34	0	33	33	981	27.8
10+	0-3	.2	.1	.2	.1	.1	*	.2	.1	.1	.1	.2	.1	.4	.1	.2	.1	.1	1.8	1.8	146	4.1
	4-10	.8	.5	.7	.4	.7	.3	.4	.4	.8	.4	.8	1.1	1.4	.8	1.2	1.0	.0	.0	.0	415	11.8
	11-21	.6	.3	.5	.5	.5	.2	.7	.3	.7	.7	.9	1.0	1.9	1.4	1.3	.7	.0	.0	.0	431	12.2
	22+	.1	*	.0	.1	*	.1	.2	.1	.3	*	.2	.3	.4	.4	.2	.1	.0	.0	.0	93	2.6
	TOTAL	59	30	52	38	47	21	56	32	69	43	76	87	143	95	101	70	2	64	64	1085	30.7
	TOTAL	129	83	142	99	151	117	196	155	288	212	373	335	476	233	246	141	2	152	152	3530	100.0
	PCT	3.7	2.4	4.0	2.8	4.3	3.3	5.6	4.4	3.2	6.0	10.6	9.5	13.5	6.6	7.0	4.0	.1	4.3	4.3	100.0	

JULY

PERIOD: (PRIMARY) 1944-1969  
(OVER-ALL) 1899-1969

AREA 0008 DUTCH HARBOR  
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8), AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	18.1	1.4	4.2	18.8	25.5	14.6	3.2	1.1	.5	.5	88.0	12.0	623
06009	21.7	1.5	4.1	19.3	26.9	13.2	4.4	.3	.2	.2	91.9	8.1	590
12015	27.7	1.1	3.9	16.3	28.8	12.9	1.9	.2	.2	.4	93.3	6.7	566
18021	24.5	2.0	7.9	18.5	23.2	12.1	2.8	.5	.2	.3	92.0	8.0	611
TOT	548	36	120	436	623	316	74	13	6	8	2180	210	2390
PCT	22.9	1.5	5.0	18.2	26.1	13.2	3.1	.5	.3	.3	91.2	8.8	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	13.0	4.5	5.3	15.4	22.7	39.1	617
06009	14.8	4.4	3.9	17.9	25.7	33.2	587
12015	17.4	4.4	5.2	19.7	28.8	24.5	563
18021	19.1	4.6	5.8	15.5	25.0	30.1	608
TOT	381	107	120	405	605	757	2375
PCT	16.0	4.5	5.1	17.1	25.5	31.9	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET, NH >4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00003	18.2	26.3	53.5	35.3	11.2	617
06009	22.0	29.6	56.6	35.6	7.8	587
12015	27.9	34.6	62.2	31.8	6.0	563
18021	24.7	37.7	62.7	30.4	6.9	608
TOT	548	760	1393	791	191	2375
PCT	23.1	32.0	58.7	33.3	8.0	100.0

JULY

PERIOD: (PRIMARY) 1944-1969  
(OVER-ALL) 1890-1969

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TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
65/69	.0	.0	.0	.0	.0	.1	.2	.3	9	.5
60/64	.0	.0	.0	.1	.2	.5	.6	.6	35	1.8
55/59	.0	.0	.0	.1	.2	1.8	4.0	2.5	166	8.5
50/54	.0	.0	.0	.0	.5	1.8	14.0	16.8	645	33.1
45/49	.0	.0	.0	.0	.2	2.6	15.2	31.0	954	49.0
40/44	.0	.0	.0	.0	.0	.0	1.2	5.8	136	7.0
35/39	.0	.0	.0	.0	.0	.0	.0	.1	1	.1
TOTAL	0	0	0	2	20	131	685	1108	1946	100.0
PCT	.0	.0	.0	.1	1.0	6.7	35.2	56.9		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
65/69	.0	.0	.1	.2	.1	.0	.1	.0	.0	.1
60/64	.2	.1	.1	.3	.2	.4	.1	.1	.0	.4
55/59	.6	1.2	.6	1.2	1.2	1.4	.8	.7	.0	.8
50/54	1.6	2.5	3.0	3.4	5.4	7.7	4.9	2.9	.0	1.6
45/49	2.8	3.0	4.2	4.1	6.2	10.7	10.6	5.7	.0	1.8
40/44	.4	.2	.6	.8	.7	.9	1.8	1.2	.0	.4
35/39	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
TOTAL	107	137	167	193	270	410	355	208	0	99
PCT	5.5	7.0	8.6	9.9	13.9	21.1	18.2	10.7	.0	5.1

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	66	62	58	50	45	43	39	50.2	985
06009	66	60	56	49	44	42	40	49.2	897
12015	65	55	53	47	43	41	39	47.6	783
18021	63	57	54	48	43	42	40	48.4	910
TOT	66	60	55	48	44	42	39	48.9	3575

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	.2	.9	10.4	43.4	45.2	89	558
06009	.0	.2	1.6	7.5	35.2	55.5	90	494
12015	.0	.0	.8	2.7	29.9	66.6	92	371
18021	.0	.0	.7	4.8	31.0	63.4	92	538
TOT	0	2	20	131	694	1114	90	1961

PERIOD: (PRIMARY) 1944-1969  
(OVER-ALL) 1899-1/69

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51-55N 165-172W

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DFG F)

AIR-SEA TMP DIF	37	41	45	49	53	57	61	65	TOT	W	WU
	40	44	48	52	56	60	64	68	FOG	FOG	FOG
17/19	.0	.0	.0	.0	.0	.1	*	*	4	*	.1
14/16	.0	.0	.0	.0	.1	.1	.1	.1	10	*	.4
11/13	.0	.0	.0	.1	.4	.3	.1	*	23	.3	.6
9/10	.0	.0	.0	.2	.4	.4	*	.0	26	.1	.9
7/8	.0	.0	.2	.7	1.3	.3	*	.0	66	.7	1.9
6	.0	.0	.3	1.0	.9	.1	.0	.0	59	.9	1.4
5	.0	.0	.9	2.0	1.2	.4	.0	.0	113	1.1	3.3
4	.0	.2	2.1	4.6	1.5	.2	.0	.0	219	2.7	5.9
3	.0	.1	1.6	3.8	.8	*	.0	.0	162	2.3	4.1
2	.0	.3	8.5	6.2	1.5	*	.0	.0	421	5.0	11.6
1	.0	.4	4.4	3.7	.6	.0	.0	.0	230	2.3	6.7
0	.0	.8	12.5	5.8	1.0	.0	.0	.0	512	5.5	14.6
-1	*	.7	4.6	2.4	.2	.0	.0	.0	201	2.0	5.9
-2	.0	1.7	5.1	1.6	.0	.0	.0	.0	214	2.4	6.1
-3	.0	.8	2.0	1.1	.0	.0	.0	.0	98	.7	3.1
-4	*	1.3	1.9	.4	*	.0	.0	.0	93	1.0	2.7
-5	*	.9	.9	.1	*	.0	.0	.0	49	.7	1.3
-6	.0	.1	.4	.1	.0	.0	.0	.0	17	.2	.5
-7/-8	.1	.2	.6	.0	.0	.0	.0	.0	21	.2	.6
-9/-10	.0	.1	.1	.0	.0	.0	.0	.0	5	.1	.1
TOTAL	5	192	1176	858	254	46	7	5	2543	718	1825
PCT	.2	7.6	46.2	33.7	10.0	1.8	.3	.2	100.0	28.2	71.8

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N					NE					48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47		
<1	.5	.5	.0	.0	.0	.1	.1	.0	.0	.0	.0	2
1-2	.1	1.3	.1	.0	.0	.0	1.2	.5	.0	.0	.0	14
3-4	.0	.5	.9	.0	.0	.0	.4	1.1	.1	.0	.0	13
5-6	.0	.2	.6	.2	.0	.1	.0	.8	.0	.0	.0	8
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
8-9	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	5	21	14	3	0	2	14	20	1	0	0	37
PCT	.6	2.5	1.7	.4	.0	.2	1.7	2.4	.1	.0	.0	4.4

HGT	E					SE					48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47		
<1	.0	.6	.0	.0	.0	.2	.6	.0	.0	.0	.0	7
1-2	.1	1.1	.9	.0	.0	.0	.9	.7	.0	.0	.0	14
3-4	.0	1.3	2.2	.4	.0	.0	.5	2.5	.2	.0	.0	27
5-6	.0	.2	.7	.2	.0	.0	.4	1.7	.4	.0	.0	20
7	.0	.0	.5	.4	.0	.0	.1	.9	.6	.0	.0	14
8-9	.0	.0	.0	.1	.0	.0	.0	.1	.2	.0	.0	3
10-11	.0	.0	.0	.0	.2	.0	.0	.0	.2	.0	.0	0
12	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	1
13-16	.0	.0	.0	.2	.0	.0	.0	.1	.0	.0	.0	0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-85	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	1	27	38	11	2	2	21	52	14	0	0	89
PCT	.1	3.2	4.5	1.3	.2	.2	2.5	6.1	1.7	.0	.0	10.5

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S					SW					TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47			
<1	.2	.8	.0	.0	.0	.1	1.2	.0	.0	.0	.9	.0	11
1-2	.1	2.0	1.2	.0	.0	.1	1.8	.7	.0	.0	28	.0	22
3-4	.0	1.9	3.2	.0	.0	.1	1.9	3.5	.4	.0	47	.0	50
5-6	.0	.9	2.5	.8	.0	.0	.4	5.2	1.1	.1	36	.0	57
7	.0	.0	2.4	.5	.0	.0	.1	3.9	1.3	.0	24	.0	45
8-9	.0	.0	.2	.6	.0	.0	.0	1.2	1.9	.0	7	.0	26
10-11	.0	.0	.1	.0	.0	.0	.0	.1	.6	.0	1	.0	6
12	.0	.0	.0	.0	.0	.0	.0	.1	.5	.4	1	.0	8
13-16	.0	.0	.0	.0	.1	.0	.0	.0	.2	.2	1	.0	4
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	3	48	81	20	1	3	45	125	50	6	153	0	229
PCT	.4	5.7	9.6	2.4	.1	.4	5.3	14.7	5.9	.7	18.0	.0	27.0

HGT	W					NW					TOTAL	48+	TOTAL	GRAND TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47				
<1	.4	1.9	.0	.0	.0	.0	.6	.0	.0	.0	19	.0	5	66
1-2	.0	2.7	1.3	.0	.0	.0	1.5	.4	.0	.0	34	.0	16	159
3-4	.2	2.2	3.2	.0	.0	.0	.9	1.5	.1	.0	48	.0	22	252
5-6	.0	.2	3.4	.6	.0	.1	.2	.6	.0	.0	36	.0	8	184
7	.0	.2	1.4	.4	.0	.0	.0	.0	.1	.0	17	.0	1	108
8-9	.0	.0	.4	.2	.0	.0	.0	.0	.0	.0	5	.0	0	43
10-11	.0	.0	.1	.4	.0	.0	.0	.0	.0	.0	4	.0	0	14
12	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	0	.0	0	11
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	.0	0	11
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0
TOTAL	5	62	83	16	0	1	28	21	2	0	156	0	52	843
PCT	.6	7.3	9.8	1.9	.0	.1	3.3	2.5	.2	.0	19.6	.0	6.1	100.0



PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1969

JULY

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	7.2	5.9	.0	.0	.0	.0					118
1-2	.7	11.8	5.4	.0	.0	.0					161
3-4	.3	9.0	17.1	1.6	.0	.0					252
5-6	.2	2.4	14.5	3.1	.1	.0					184
7	.0	.4	8.5	3.0	.0	.0					108
8-9	.0	.0	1.8	3.0	.0	.0					43
10-11	.0	.0	.4	1.1	.0	.0					14
12	.0	.0	.2	.4	.6	.0					11
13-16	.0	.0	.1	.8	.3	.0					11
17-19	.0	.0	.0	.0	.0	.0					0
20-22	.0	.0	.0	.0	.0	.0					0
23-25	.0	.0	.0	.0	.0	.0					0
26-32	.0	.0	.0	.0	.0	.0					0
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	76	266	434	117	9	0					902
PCT	8.4	29.5	48.1	13.0	1.0	.0					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-50	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.5	7.8	14.7	8.0	2.7	.8	.3	.3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	379	3
6-7	.1	1.7	8.9	8.1	6.4	2.6	.9	.3	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	310	5
8-9	.0	.7	1.7	5.0	4.5	2.0	1.1	.4	.5	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	166	6
10-11	.0	.0	.4	.6	1.6	1.1	.4	.1	.5	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	49	7
12-13	.0	.0	.0	.3	.2	.1	.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	8	7
>13	.0	.0	.0	.0	.3	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4	8
INDET	12.0	.0	.2	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	130	0
TOTAL	142	107	271	233	164	68	27	12	20	2	0	0	0	0	0	0	0	0	0	1046	4
PCT	13.6	10.2	25.9	22.3	15.7	6.5	2.6	1.1	1.9	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

AUGUST

PERIOD: (PRIMARY) 1943-1969  
(OVER-ALL) 1900-1969

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			MAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FGG WD PCPN	SMOKE HAZE	DUST BLWG	NO DUST SNOW	SIG WEA	
N	.3	*	.3	.0	.0	.0	.0	.0	12	.0	.5	*	.0	.0	2.7	98
NNE	.3	.0	.2	.0	.0	.0	.0	.0	10	.0	.2	.1	.0	.0	1.1	48
NE	.2	.0	.1	.0	.0	.0	.0	.0	9	.0	.2	*	.0	.0	1.0	43
ENE	.2	*	.3	.0	.0	.0	.0	.0	13	.0	.3	*	.0	.0	.8	43
E	.5	.0	.2	.0	.0	.0	.0	.0	17	.0	.3	.1	.0	.0	2.1	84
ESE	.6	.0	.2	.0	.0	.0	.0	.0	20	.0	.5	.0	.0	.0	1.3	68
SE	.7	*	.5	.0	.0	.0	.0	1.3	33	.0	1.2	.2	.0	.0	2.2	128
SSE	.4	.0	.5	.0	.0	.0	.0	.7	18	.0	1.8	.0	.0	.0	2.2	124
S	1.1	.1	1.0	.0	.0	.0	.0	2.1	55	.0	3.2	.1	.0	.0	4.1	250
SSW	.5	.1	.5	.0	.0	.0	.0	1.0	26	.0	3.0	.1	.0	.0	3.3	193
SW	.7	*	1.3	.0	.0	.0	.0	2.0	52	.0	4.0	.1	.0	.0	5.6	306
WSW	.5	.1	1.0	.0	.0	.0	.0	1.3	34	.0	2.4	.2	.0	.0	6.5	272
W	.8	.1	1.0	.0	.0	.0	.0	1.8	47	.0	2.4	.1	.0	.0	12.6	443
WNW	.2	.0	.3	.0	.0	.0	.0	.5	12	.0	1.1	.0	.0	.0	5.9	195
NW	.3	.0	.1	.0	.0	.0	.0	.3	9	.0	.8	.1	.0	.0	5.4	173
NNW	.1	.0	.2	.0	.0	.0	.0	.3	7	.0	.6	*	.0	.0	2.2	83
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	*	1
CALM	*	.0	.2	.0	.0	.0	.0	.0	5	.0	1.1	*	.0	.0	1.4	73
TOT OBS	194	14	199	0	0	0	0	.2	379	0	623	30	0	0	1593	2625
TOT PCT	7.4	.5	7.6	.0	.0	.0	.0	14.4		.0	23.7	1.1	.0	.0	60.7	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			MAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FGG WD PCPN	SMOKE HAZE	DUST BLWG	NO DUST SNOW	SIG WEA	
00003	5.9	.6	6.1	.0	.0	.0	.0	.0	84	.0	23.0	1.4	.0	.0	63.6	700
06009	6.9	.3	5.5	.0	.0	.0	.0	.0	80	.0	24.0	.8	.0	.0	62.9	649
12015	7.7	.8	8.5	.0	.0	.0	.0	.0	101	.0	20.9	1.1	.0	.0	62.4	647
18021	8.9	.5	10.1	.0	.0	.0	.0	.0	115	.0	27.0	1.2	.0	.0	54.2	655
TOT	194	14	200	0	0	0	0	.0	380	0	629	30	0	0	1612	2651
PCT	7.3	.5	7.5	.0	.0	.0	.0	14.3		.0	23.7	1.1	.0	.0	60.8	100.0

AUGUST

PERIOD: (PRIMARY) 1943-1969  
(OVER-ALL) 1900-1969

AREA 0008 DUTCH HARBOR  
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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)					48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)					15	18	21
	0-3	4-10	11-21	22-33	34-47					00	03	06	09	12			
N	.6	1.7	.9	.6	.0	.0	121	3.9	11.7	4.0	4.7	3.4	5.6	3.6	4.1	4.2	
NNE	.2	.8	.6	.3	.0	.0	58	1.8	12.5	1.8	.0	2.0	1.4	1.0	2.0	4.2	
NE	.4	1.0	.4	.1	.0	.0	57	1.8	8.6	2.5	3.5	1.4	.0	2.0	1.7	1.1	
ENE	.2	.9	.4	.1	*	.0	51	1.6	10.5	2.2	2.3	.7	2.8	1.3	1.4	3.2	
E	.3	1.4	1.2	.4	*	.0	106	3.4	11.9	2.9	2.3	5.1	1.4	3.6	2.7	2.1	
ESE	.1	.8	1.1	.6	*	.0	82	2.6	15.2	2.6	2.3	1.5	1.4	2.8	2.6	7.4	
SE	.4	2.1	1.8	.6	.2	.0	159	5.1	12.7	4.7	3.5	5.3	7.0	5.4	5.7	2.1	
SSE	.2	1.2	2.2	.8	.1	*	140	4.5	15.2	4.2	4.7	4.4	.0	4.3	5.0	6.3	
S	.7	3.2	3.8	1.4	.3	.0	293	9.3	13.8	9.1	11.6	8.7	5.6	9.9	10.7	8.4	
SSW	.2	2.3	3.3	1.6	.0	.0	234	7.5	15.3	6.9	5.8	7.0	15.5	7.6	9.1	7.4	
SW	.7	3.4	5.8	2.1	.1	.0	382	12.2	14.7	14.4	12.8	11.8	12.7	11.2	11.6	8.4	
WSW	.4	2.6	4.9	1.9	.2	.0	312	9.9	15.8	10.2	10.5	9.0	9.9	9.4	9.7	13.7	
W	.7	5.2	7.2	2.7	.4	.0	507	16.2	14.7	16.1	14.0	16.6	21.1	17.8	14.7	12.6	
WNW	.2	2.3	3.7	1.0	.1	.0	231	7.4	14.4	5.0	7.0	8.6	5.6	8.9	6.7	10.5	
NW	.4	2.7	2.9	.8	*	.0	213	6.8	13.4	7.3	8.1	7.5	7.0	5.4	7.3	2.1	
NNW	.1	1.3	1.0	.6	.0	.0	94	3.0	13.4	3.0	4.7	3.4	1.4	2.6	3.0	3.2	
VAR	*	.0	.0	.0	.0	.0	1	*	2.0	.1	.0	.0	.0	.0	.0	.0	
CALM	3.1	1029	1298	487	46	1	96	3.1	.0	2.9	2.3	3.7	1.4	3.0	3.6	2.1	
TOT OBS	276	32.8	41.4	15.5	1.5	*	3137	100.0	13.7	758	86	711	71	606	700	95	
TOT PCT	8.8							100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)								
	0-6	7-16	17-27	28-40	41+				00	03	06	09	12	15	18	21	
N	1.6	2.5	1.4	.2	.0	179	5.7	12.0	5.8	4.7	5.3	7.0	4.6	8.2	6.1	8.4	
NE	1.5	1.4	.5	*	.0	108	3.4	9.5	4.7	5.8	2.1	2.8	3.3	3.6	3.1	4.2	
E	1.4	2.8	1.5	.3	.0	188	6.0	13.4	5.5	4.7	6.6	2.8	6.4	7.3	5.3	9.5	
SE	2.2	4.2	2.7	.4	*	299	9.5	13.9	9.0	8.1	9.7	7.0	9.7	7.3	10.7	8.4	
S	2.5	8.8	4.3	1.1	*	527	16.8	14.5	16.0	17.4	15.8	21.1	17.5	13.6	18.1	16.8	
SW	3.3	9.4	7.6	1.8	.1	694	22.1	15.2	24.5	23.3	20.8	22.5	20.6	26.4	21.3	22.1	
W	3.7	11.4	6.9	1.5	*	738	23.5	14.6	21.1	20.9	25.2	26.8	26.7	25.5	21.4	23.2	
NW	1.9	4.8	2.8	.3	.0	307	9.8	13.4	10.3	12.8	10.8	8.5	8.1	8.2	10.3	5.3	
VAR	*	.0	.0	.0	.0	1	*	2.0	.1	.0	.0	.0	.0	.0	.0	.0	
CALM	3.1	1421	869	177	5	96	3.1	.0	2.9	2.3	3.7	1.4	3.0	.0	3.6	2.1	
TOT OBS	665	45.3	27.7	5.6	.2	3137	100.0	13.7	758	86	711	71	606	110	700	95	
TOT PCT	21.2						100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

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TABLE 4

HOUR	PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)				
	1-3	4-10	11-21	22-33	34-47
00003	6.0	33.5	40.5	15.8	1.4
06009	6.4	30.7	42.2	16.0	1.3
12015	3.9	33.2	44.7	14.4	1.1
18021	6.3	33.8	38.6	15.8	2.0
TOT	179	1029	1298	487	46
PCT	5.7	32.8	41.4	15.5	1.5
					3.1
					100.0

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION							TOTAL OBS	MEAN CLOUD COVER
	0-2	3-4	5-7	8-6	OBSCD	7-5	2-5		
N	.2	.4	.7	2.5	75	7.0			
NNE	.1	.1	.2	1.3	33	7.1			
NE	.1	.0	.4	1.3	34	7.3			
ENE	.1	.0	.3	.9	23	7.4			
E	.1	.1	.6	2.8	72	7.4			
ESE	.0	.1	.3	2.2	51	7.8			
SE	.2	.2	.8	3.3	86	7.3			
SSE	.0	.2	.6	3.9	91	7.7			
S	.1	.1	1.3	7.6	179	7.7			
SSW	.2	.1	.7	6.1	139	7.6			
SW	.3	.2	2.0	8.1	207	7.5			
WSW	.3	.5	1.5	7.7	196	7.4			
W	.8	.6	4.0	13.3	368	7.3			
WNW	.2	.6	1.9	4.9	150	7.1			
NW	.5	.5	2.3	4.3	149	6.7			
NNW	.3	.3	.7	2.1	66	6.8			
VAR	.0	.0	.0	.1	1	8.0			
CALM	.2	.2	.5	1.7	51	6.7			
TOT OBS	65	76	369	1461	1971	7.3			
TOT PCT	3.3	3.9	18.7	74.1	100.0				

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH &gt;4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION											
WIND DIR	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8 TOTAL
	149	299	599	999	1999	3499	4999	6499	7999	ANY HGT	OBS
N	.6	.1	.2	.8	1.0	.5	.1	.0	.0	.0	.7
NNE	.1	.0	.2	.2	.7	.2	.0	.0	.0	.0	.4
NE	.3	.1	.2	.4	.4	.2	.1	.1	.0	.0	.3
ENE	.2	.0	.0	.2	.4	.1	.1	.0	.0	.0	.2
E	.6	.1	.3	.5	1.3	.5	.1	.0	.1	.0	.3
ESE	.6	.1	.2	.4	.7	.6	.0	.0	.0	.1	.1
SE	1.3	.1	.2	.8	1.0	.4	.0	.0	.0	.0	.6
SSE	1.6	.0	.6	.9	.6	.5	.1	.0	.0	.0	.4
S	3.7	.1	.7	1.5	1.5	.8	.3	.0	.0	.1	.5
SSW	2.6	.3	.6	1.5	1.1	.5	.1	.0	.0	.0	.4
SW	2.8	.3	.6	2.2	2.1	1.3	.3	.2	.0	.0	.8
WSW	2.0	.2	.8	2.0	2.5	.9	1.1	.1	.0	.0	1.3
W	2.4	.2	1.3	4.5	4.0	2.6	1.1	.2	.1	.0	2.4
WNW	1.0	.0	.2	1.4	2.5	1.1	.3	.1	.0	.0	1.1
NW	.8	.2	.3	1.2	1.6	1.3	.3	.0	.2	.0	1.7
NNW	.6	.1	.1	.7	.7	.4	.1	.0	.0	.0	.7
VAR	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.8	.0	.1	.1	.3	.4	.2	.0	.1	.1	.7
TOT OBS	434	31	123	375	441	238	61	10	9	4	245
TOT PCT	22.0	1.6	6.2	19.0	22.4	12.1	3.1	.5	.5	.2	12.4

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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)				
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2
= OR >6500	.5	.6	.6	.7	.7
= OR >5000	.9	1.1	1.2	1.2	1.2
= OR >3500	2.6	4.0	4.2	4.3	4.3
= OR >2000	8.8	14.3	15.6	16.0	16.2
= OR >1000	17.4	31.8	36.5	37.7	38.2
= OR >600	23.6	44.5	53.7	55.9	56.6
= OR >300	24.5	47.7	58.3	61.5	62.2
= OR >150	24.6	48.2	59.1	62.4	63.5
= OR > 0	24.8	49.8	62.4	67.9	70.6
TOTAL	489	982	1230	1337	1391
					1536
					1690
					1723

TOTAL NUMBER OF OBS: 1970

PCT FREQ NH <5/8: 12.5

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

TOTAL							
0	1	2	3	4	5	6	7
1.7	1.9	3.3	2.6	3.1	3.7	6.5	11.9
						45.3	20.1
						20.1	2108

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.0	.0	.0	*	*	.0	*	.1	.4	.2	.3	.1	.4	*	.0	.0	.0	.0	44	1.7
NO PCP	.3	*	.1	.2	.2	.4	.7	1.1	2.4	2.0	2.2	1.4	1.3	.5	.5	.3	.0	.6	371	14.2
TOTAL	7	1	2	5	5	11	20	30	72	58	67	40	44	15	14	9	0	15	415	15.9
PCP	*	.0	*	.1	*	.1	.1	.0	.3	.2	.1	.1	.1	*	*	.0	.0	.0	31	1.2
NO PCP	.2	*	.1	.1	.1	.0	.4	.1	.3	.2	.7	.4	.2	.2	.1	.1	.0	.2	87	3.3
TOTAL	5	1	3	5	4	2	13	3	17	10	20	13	6	6	3	3	0	4	118	4.5
PCP	*	.1	.1	.1	.1	.2	.2	.2	.3	.1	.3	.3	.2	.1	.0	*	.0	.0	61	2.3
NO PCP	*	.1	.1	.1	.1	*	.2	.3	.3	.3	.8	.5	.6	.2	.1	*	.0	.3	108	4.1
TOTAL	2	5	5	5	5	6	9	13	15	11	29	20	20	9	3	2	1	9	169	6.5
PCP	.1	.2	.1	.1	.2	.3	.5	.2	.6	.2	.6	.2	.5	.2	.2	.1	.0	.2	114	4.4
NO PCP	.1	.2	.1	.1	.2	.2	.3	.7	.7	1.1	1.2	1.0	1.8	.8	.7	.2	.0	*	248	9.5
TOTAL	6	10	4	5	12	13	20	23	34	34	48	33	60	26	22	6	0	6	362	13.9
PCP	.2	*	.1	.1	.1	.2	.4	.2	.5	.3	.5	.5	.5	*	.1	.1	.0	.0	99	3.8
NO PCP	.9	.5	.2	.3	.7	.8	1.0	.8	2.2	1.9	2.7	3.1	5.9	2.1	2.1	1.1	.0	.3	698	26.7
TOTAL	30	13	8	12	22	26	36	27	71	56	82	95	165	57	57	31	0	9	797	30.5
PCP	*	.0	.1	.0	.1	.0	.1	.0	*	.1	.1	.1	.3	*	.0	*	.0	.0	23	.9
NO PCP	1.8	.7	.7	.4	1.2	.3	1.1	1.0	1.5	.8	2.1	2.6	5.4	3.0	2.8	1.2	.0	1.1	726	27.8
TOTAL	47	18	21	11	34	9	30	25	41	24	57	70	147	80	73	32	0	30	749	28.7
TOTAL	97	48	43	43	82	67	128	121	250	193	303	271	442	193	172	83	1	73	2610	100.0
PCT	3.7	1.8	1.6	1.6	3.1	2.6	4.9	4.6	9.6	7.4	11.6	10.4	16.9	7.4	6.6	3.2	*	2.8	100.0	

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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	* .1	* .0	* .0	* .0	* .0	* .0	* .0	* .1	* .1	* .0	* .0	* .1	* .0	* .0	* .0	* .0	* .0	* .5	27	.9
	4-10	.1 *	* .0	* .0	* .0	* .0	* .0	* .0	.2	.8	.8	.8	.5	.6	.3	.2	.1	.0	.0	158	5.2
	11-21	* .0	* .0	* .0	* .0	* .0	* .0	* .0	.6	1.1	1.1	1.1	.6	.8	.2	.2	.2	.0	.0	181	5.9
	22+	* .0	* .0	* .0	* .0	* .0	* .0	* .0	.1	.5	.5	.3	.1	.2	.0	*	*	.0	.0	60	2.1
	TOTAL	7	1	2	5	5	11	23	31	76	60	67	40	46	15	15	10	0	15	429	14.0
1/2<1	0-3	* .1	* .0	* .0	* .0	* .0	* .0	* .0	* .0	* .0	* .0	* .0	* .0	* .0	* .0	* .0	* .0	* .0	* .1	8	.3
	4-10	.1 *	* .0	* .0	* .0	* .0	* .0	* .0	.1	.2	.1	.1	.1	.1	.1	.1	.1	.0	.0	39	1.3
	11-21	* .0	* .0	* .0	* .0	* .0	* .0	* .0	.1	.2	.1	.5	.3	.2	.1	*	*	.0	.0	53	1.7
	22+	* .0	* .0	* .0	* .0	* .0	* .0	* .0	*	.1	.1	.1	.1	*	.0	* .0	*	.0	.0	26	.8
	TOTAL	5	1	3	5	4	2	13	3	17	11	22	15	9	6	3	3	0	4	126	4.1
1<2	0-3	* .0	* .0	* .0	* .0	* .0	* .0	* .0	* .0	* .1	* .0	* .0	* .0	* .0	* .0	* .0	* .0	* .0	* .3	18	.6
	4-10	.1 *	* .1	* .1	* .1	* .1	* .1	* .1	.2	.1	.1	.2	.1	.2	.1	*	*	.0	.0	38	1.2
	11-21	* .0	* .1	* .1	* .1	* .1	* .1	* .1	.3	.2	.1	.4	.3	.1	.1	*	*	.0	.0	72	2.3
	22+	* .0	* .0	* .1	* .1	* .1	* .1	* .1	.1	.2	.2	.4	.3	.1	.1	.0	*	.0	.0	50	1.6
	TOTAL	3	5	5	5	5	6	10	14	15	13	30	20	21	10	3	3	1	9	178	5.8
2<5	0-3	* .0	* .0	* .0	* .0	* .0	* .0	* .0	* .0	* .0	* .0	* .1	* .0	* .1	* .0	* .1	* .1	* .0	* .2	21	.7
	4-10	.1 *	* .1	* .1	* .2	* .2	* .1	* .3	.1	.4	.2	.2	.4	.3	.3	.2	.1	.0	.0	90	2.9
	11-21	* .0	* .2	* .1	* .0	* .2	* .2	.2	.6	.5	.7	.7	.4	1.1	.4	.4	.0	.0	.0	171	5.6
	22+	* .1	* .1	* .1	* .0	* .1	* .1	.2	.1	.4	.4	.7	.5	.6	.2	.2	.1	.0	.0	109	3.6
	TOTAL	6	11	4	6	13	13	21	24	36	39	53	38	63	29	23	6	0	6	391	12.8
5<10	0-3	* .2	* .2	* .3	* .3	* .1	* .4	* .2	* .1	* .2	* .1	* .3	* .1	* .2	* .1	* .1	* .1	* .0	* .6	73	2.4
	4-10	.5 *	* .2	* .2	* .3	* .3	* .4	* .5	.3	.8	.7	.9	.7	2.0	.4	.9	.3	.0	.0	289	9.4
	11-21	* .2	* .3	* .1	* .2	* .3	* .5	.5	.3	1.2	1.1	1.6	1.9	2.4	1.2	1.0	.4	.0	.0	410	13.4
	22+	* .3	* .1	* .0	* .0	* .1	* .2	.2	.4	.4	.3	.5	.8	1.3	.4	.3	.3	.0	.0	170	5.5
	TOTAL	40	17	11	17	27	31	42	34	78	67	107	107	183	66	68	34	0	17	942	30.7
10+	0-3	* .3	* .1	* .3	* .3	* .2	* .0	* .1	* .0	* .3	* .1	* .2	* .1	* .4	* .1	* .1	* .0	* .0	* .4	119	3.9
	4-10	.8 *	* .5	* .6	* .3	* .7	* .1	.8	.4	.9	.5	1.2	.8	2.1	1.2	1.3	.7	.0	.0	388	12.7
	11-21	* .6	* .1	* .1	* .1	* .6	* .2	.5	.4	.7	.7	1.5	1.5	2.5	1.6	1.3	.4	.0	.0	394	12.9
	22+	* .2	* .1	* .0	* .0	* .*	* .1	.1	.1	.1	.1	.4	.4	.8	.4	.4	.1	.0	.0	99	3.2
	TOTAL	58	23	30	13	46	12	45	29	63	41	98	89	178	100	95	37	0	44	1000	32.6
	TOTAL	119	58	55	51	100	75	154	135	285	231	373	308	500	226	207	93	1	95	3066	100.0
	PCT	3.9	1.9	1.8	1.7	3.3	2.4	5.0	4.4	9.3	7.5	12.2	10.0	16.3	7.4	6.8	3.0	*	3.1	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH > 4/8), AND OCCURRENCE OF NH < 5/8 BY HOUR													
HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH < 5/8 ANY PGT	TOTAL OBS
00003	17.8	1.9	6.8	16.8	23.2	11.4	3.3	1.0	.2	.4	82.8	17.2	517
06009	19.6	2.0	4.9	22.2	23.8	11.0	2.8	.4	.4	.0	87.0	13.0	509
12015	28.3	.4	6.1	16.6	20.1	12.2	2.9	.4	.8	.0	87.8	12.2	477
18021	22.3	1.8	6.8	19.5	21.1	13.3	3.2	.4	.4	.4	89.3	10.7	497
TOT	438	31	123	376	442	249	61	11	9	4	1734	266	2000
PCT	21.9	1.6	6.2	19.8	22.1	12.1	3.1	.6	.5	.2	86.7	13.3	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR									
HOUR (GMT)	< 1/2	1/2 < 1	1 < 2	2 < 5	5 < 10	10+	TOTAL OBS		
00003	14.0	3.9	5.1	11.8	27.6	37.6	508		
06009	16.3	2.8	5.0	12.9	28.2	34.9	504		
12015	19.7	2.8	6.2	13.8	31.4	26.1	471		
18021	18.3	1.8	6.0	13.3	27.1	33.5	487		
TOT	335	56	109	255	562	653	1970		
PCT	17.0	2.8	5.5	12.9	28.5	33.1	100.0		

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR CEILING HGT (FEET, NH >4/8), BY HOUR						
HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND5+	NH <5/8 AND 5+	TOTAL OBS
00003	18.7	29.9	51.2	33.7	15.2	508
06009	20.2	29.0	57.1	30.8	12.1	504
12015	28.5	36.7	59.7	29.3	11.0	471
18021	22.8	32.0	58.1	33.1	8.8	487
TOT	442	627	1112	625	233	1970
PCT	22.4	31.8	56.4	31.7	11.8	100.0



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PERIOD: (PRIMARY) 1943-1969  
(OVER-ALL) 1900-1969

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TABLE 13

TEMP F	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP										
	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100			
65/69	.0	.0	.0	.1	.1	.2	.1	.1			.1
60/64	.0	.0	.0	.1	.2	.2	.6	1.0			1.0
55/59	.0	.0	.0	.0	.2	2.7	5.6	7.5			7.5
50/54	.0	.0	.0	.0	.5	3.9	21.4	29.8			29.8
45/49	.0	.0	.0	.0	.1	.9	5.8	18.2			18.2
40/44	.0	.0	.0	.0	.0	.0	.0	.9			.9
TOTAL	0	0	0	2	20	147	620	1065			1065
PCT	.0	.0	.0	.1	1.1	7.9	33.4	57.4			57.4

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP										
N	NE	E	SE	S	SW	W	NW	VAR	CALM	
.0	.0	.0	.2	.1	.2	.1	.0	.0	.0	.0
.1	.0	.2	.3	.4	.5	.1	.2	.0	.3	.3
.6	.5	1.3	2.3	3.2	4.0	2.6	.7	.0	.8	.8
3.2	1.9	3.3	5.6	10.9	13.6	11.6	4.4	.0	1.2	1.2
1.9	1.2	1.3	2.0	2.6	5.1	7.0	2.9	.0	1.0	1.0
.0	.0	.2	.1	.1	.2	.4	.1	.0	.0	.0
108	67	116	192	320	436	402	152	0	61	61
5.8	3.6	6.3	10.4	17.3	23.5	21.7	8.2	.0	3.3	3.3

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR										
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS	
00003	69	63	59	52	47	45	43	52.4	852	
06009	68	60	57	51	47	45	43	51.6	791	
12015	67	57	55	50	46	44	43	50.2	720	
18021	69	59	57	51	46	44	43	51.0	795	
TOT	69	61	57	51	46	45	43	51.3	3158	

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR										
HOUR (GMT)	0-29	30-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS		
00003	.0	.2	1.4	11.8	38.8	47.8	89	508		
06009	.0	.2	1.0	6.6	36.1	56.1	90	488		
12015	.0	.0	.3	6.1	31.0	62.7	92	378		
18021	.0	.0	1.4	7.1	27.2	64.2	91	492		
TOT	0	2	20	150	624	1070	90	1866		

PERIOD: (PRIMARY) 1943-1969  
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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	41	45	49	53	57	61	65	TOT	W	WG
	44	48	52	56	60	64	68		FOG	FOG
17/19	.0	.0	.0	.0	.0	.0	*	1	.0	*
14/16	.0	.0	.0	.2	.1	*	.0	7	.1	.2
11/13	.0	.0	*	.2	.3	*	*	13	.3	.3
9/10	.0	.0	.4	.1	.1	*	*	18	.2	.6
7/8	.0	.1	.5	.9	.8	*	.0	54	.8	1.6
6	.0	.1	.4	.8	.1	.1	.0	36	.5	1.1
5	.0	.8	1.2	2.3	1.0	.1	.0	125	1.7	3.7
4	.0	1.0	2.2	3.4	.6	.1	.0	169	2.6	4.7
3	.0	.6	2.4	2.5	.4	.0	.0	135	2.0	3.8
2	.1	1.8	6.1	4.1	.5	*	.0	292	3.8	8.8
1	.1	1.6	4.8	3.0	*	.0	.0	221	2.4	7.2
0	.2	4.7	9.8	4.0	.3	.0	.0	438	4.1	14.8
-1	.2	2.2	5.8	1.9	*	.0	.0	236	1.9	8.3
-2	.0	3.5	5.6	.7	.1	.0	.0	229	1.6	3.3
-3	.0	1.7	3.0	.4	.0	.0	.0	118	.8	4.3
-4	*	1.9	2.7	.2	.0	.0	.0	111	1.2	3.6
-5	.1	1.4	1.2	.1	.0	.0	.0	65	.6	2.2
-6	.1	.3	.1	.0	.0	.0	.0	14	*	.6
-7/-8	.2	.6	.2	.1	.0	.0	.0	24	.2	.9
-9/-10	.0	.3	.2	.0	.0	.0	.0	11	.1	.4
TOTAL	24	524	1078	575	102	11	3	2317	574	1743
PCT	1.0	22.6	46.5	24.8	4.4	.5	.1	100.0	24.8	75.2

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N					NE					TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47			
<1	.0	.4	.0	.0	.0	.2	.7	.0	.0	.0	4	.0	8
1-2	.2	1.0	.1	.0	.0	.0	.4	.1	.0	.0	12	.0	5
3-4	.0	.3	.5	.0	.0	.1	.2	.5	.0	.0	13	.0	8
5-6	.0	.1	.4	.2	.0	.0	.0	.1	.0	.0	7	.0	1
7	.0	.2	.2	.0	.0	.0	.0	.1	.0	.0	4	.0	1
8-9	.0	.0	.1	.3	.0	.0	.0	.0	.0	.0	4	.0	0
10-11	.0	.0	.1	.3	.0	.0	.0	.0	.0	.0	4	.0	0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
13-16	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	1	.0	0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	2	24	14	9	0	3	12	8	0	0	49	0	23
PCT	.2	2.6	1.5	1.0	.0	.3	1.3	.9	.0	.0	5.4	.0	2.5

HGT	E					SE					TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47			
<1	.1	.7	.0	.0	.0	.3	.8	.0	.0	.0	7	.0	10
1-2	.1	1.1	.4	.0	.0	.0	.9	.4	.0	.0	15	.0	12
3-4	.0	.8	1.1	.0	.0	.0	1.1	.9	.4	.0	17	.0	22
5-6	.0	.0	.9	.5	.1	.0	.0	2.2	.2	.1	14	.0	23
7	.0	.0	.4	.2	.0	.0	.0	1.1	.4	.0	6	.0	14
8-9	.0	.0	.3	.1	.1	.0	.0	.1	.0	.0	5	.0	1
10-11	.0	.0	.0	.2	.0	.0	.0	.0	.3	.0	2	.0	3
12	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	0	.0	3
13-16	.0	.0	.0	.3	.0	.0	.0	.1	.2	.0	3	.0	3
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	2	23	29	13	2	3	25	44	16	1	69	1	90
PCT	.2	2.5	3.2	1.4	.2	.3	2.7	4.8	1.7	.1	7.5	.1	9.8

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S					SW					TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47			
<1	.3	.1	.0	.0	.0	.0	.9	.0	.0	.0	4	.0	.8
1-2	.1	2.2	.8	.0	.0	.3	2.4	1.7	.0	.0	28	.0	41
3-4	.2	1.6	2.1	.4	.0	.0	1.3	3.8	.0	.0	40	.0	47
5-6	.0	.7	2.1	.3	.0	.0	.9	2.5	.8	.1	28	.0	39
7	.0	.3	1.1	.3	.0	.0	.2	2.3	1.3	.0	16	.0	35
8-9	.0	.0	.1	.5	.0	.0	.0	.9	.4	.2	6	.0	14
10-11	.0	.0	.0	.5	.2	.0	.1	.2	.0	.0	7	.0	3
12	.0	.0	.2	.2	.1	.0	.0	.0	.2	.2	5	.0	4
13-16	.0	.0	.0	.1	.0	.0	.0	.0	.3	.1	1	.0	5
17-19	.0	.0	.0	.0	.0	.0	.0	.1	.2	.0	0	.0	3
20-22	.0	.0	.0	.1	.0	.0	.0	.0	.1	.0	1	.0	1
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.1	.2	0	.0	3
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	6	45	58	24	3	3	53	107	32	8	136	.0	203
PCT	.7	4.9	6.3	2.6	.3	.3	5.8	11.7	3.5	.9	14.9	.0	22.2

HGT	W					NW					TOTAL	48+	GRAND TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47			
<1	.2	2.1	.0	.0	.0	.2	.9	.0	.0	.0	21	.0	10
1-2	.3	2.7	1.5	.0	.0	.0	2.0	.1	.0	.0	42	.0	19
3-4	.2	1.7	4.5	.4	.0	.0	1.4	1.1	.1	.0	63	.0	174
5-6	.0	.8	4.0	.3	.2	.0	.7	2.2	.5	.0	49	.0	234
7	.0	.0	1.6	1.4	.0	.0	.1	.4	.1	.0	28	.0	192
8-9	.0	.2	.4	.7	.0	.0	.1	.5	.4	.1	12	.0	110
10-11	.0	.0	.7	.7	.3	.0	.0	.0	.1	.0	15	.0	53
12	.0	.0	.2	.1	.2	.0	.0	.0	.0	.0	5	.0	35
13-16	.0	.0	.0	.4	.0	.0	.0	.0	.2	.0	4	.0	16
17-19	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	1	.0	4
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	2
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	3
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	1
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	7	69	119	38	8	2	47	40	14	1	241	.0	915
PCT	.8	7.5	13.0	4.2	.9	.2	5.1	4.4	1.5	.1	26.3	.0	103.0

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1969

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TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL DBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	5.4	6.2	.0	.0	.0	.0					111
1-2	1.1	12.1	5.0	.0	.0	.0					175
3-4	.6	8.7	13.9	1.4	.0	.0					235
5-6	.0	2.9	13.9	2.8	.5	.0					193
7	.0	.8	7.0	3.7	.0	.0					110
8-9	.0	.3	2.4	2.4	.4	.0					53
10-11	.0	.1	.9	2.1	.5	.0					35
12	.0	.0	.4	.6	.5	.1					16
13-16	.0	.0	.2	1.7	.1	.0					19
17-19	.0	.0	.1	.2	.1	.0					4
20-22	.0	.0	.0	.2	.0	.0					2
23-25	.0	.0	.0	.1	.2	.0					3
26-32	.0	.0	.0	.1	.0	.0					1
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	69	298	420	146	23	1					957
PCT	7.2	31.1	43.9	15.3	2.4	.1					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.2	10.9	13.8	7.6	2.6	.9	.4	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.399	3
6-7	.0	1.4	4.7	11.3	6.2	2.4	1.4	.6	.9	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.307	5
8-9	.0	.5	.9	3.6	5.1	2.9	1.2	.9	.9	.0	.0	.3	.1	.0	.0	.0	.0	.0	.0	.174	7
10-11	.0	.0	.3	.4	1.0	2.1	.9	.8	.4	.2	.1	.1	.1	.0	.0	.0	.0	.0	.0	.66	9
12-13	.0	.0	.0	.0	.0	.7	1.2	.2	.9	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.35	11
>13	.0	.0	.0	.2	.0	.0	.0	.0	.5	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	12
INDET	6.0	.3	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.68	0
TOTAL	76	138	209	245	159	94	54	28	40	5	4	4	2	0	0	0	0	0	0	1058	5
PCT	7.2	13.0	19.8	23.2	15.0	8.9	5.1	2.6	3.8	.5	.4	.4	.2	.0	.0	.0	.0	.0	.0	100.0	

SEPTEMBER

PERIOD: (PRIMARY) 1943-1969  
(OVER-ALL) 1900-1969

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TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN SHWR	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FOG PCPN	SMOKE HAZE	DUST BLWG	NO SNOW	SIG WEA	
N	.6	.0	.4	.0	.0	.0	.0	1.0	23	.0	.2	*	.0	.0	5.0	143
NNE	.4	*	.2	.0	.0	.0	.0	.7	15	.0	*	.0	.0	.0	2.4	72
NE	.7	.0	.3	.0	.0	.0	.0	1.0	23	.0	.3	.0	*	.0	2.9	97
ENE	.7	.0	.4	.0	.0	.0	.0	1.2	27	.0	.3	.0	.0	.0	1.5	68
E	.7	.0	.7	.0	.0	.0	.0	1.5	34	.0	.5	*	.0	.0	2.4	101
ESE	.7	*	.3	.0	.0	.0	.0	.9	20	.0	.3	.0	.0	.0	1.8	69
SE	.5	.0	.7	.0	.0	.0	.0	1.3	29	.0	.6	.0	.0	.0	2.8	108
SSE	.4	.0	.4	.0	.0	.0	.0	.8	19	.0	1.1	.0	.0	.0	2.4	100
S	.6	.3	.8	.0	.0	.0	.0	1.7	39	.0	1.4	.1	.0	.0	3.8	161
SSW	.5	.1	.3	.0	.0	.0	.0	.8	19	.0	.7	.0	.0	.0	2.7	96
SW	.9	.0	.3	.0	.0	.0	.0	1.2	27	.0	.9	*	.0	.0	4.8	158
WSW	.4	.2	.3	.0	.0	.0	.0	.9	21	.0	.6	.0	.0	.0	5.8	167
W	.7	.1	.7	.0	.0	.0	.0	1.5	34	.0	.7	*	*	.0	11.8	323
WNW	.3	.1	.3	.0	.0	.0	.0	.7	16	.0	.5	.0	.0	.0	8.5	221
NW	.6	.1	.3	.0	.0	.0	.0	1.0	22	.0	.4	.0	.0	.0	8.2	220
NNW	.3	.0	.1	.0	.0	.0	.0	.3	8	.0	.2	*	.0	.0	6.1	152
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
CALM	.1	.0	*	.0	.0	.0	.0	.1	2	.0	.3	*	.0	.0	.9	30
TOT OBS	207	23	154	0	0	0	0	16.5	378	0	210	8	2	1688	2286	
TOT PCT	9.1	1.0	6.7	.0	.0	.0	.0			.0	9.2	.3	.1	73.8	100.0	

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN SHWR	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FOG PCPN	SMOKE HAZE	DUST BLWG	NO SNOW	SIG WEA	
00003	7.4	.9	6.5	.0	.0	.0	.0	14.4	93	.0	9.3	.2	.2	.2	76.1	648
06009	8.5	1.1	6.2	.0	.0	.0	.0	15.6	86	.0	10.0	.7	.2	.2	73.5	550
12015	10.6	.7	6.4	.0	.0	.0	.0	17.6	96	.0	6.8	.4	.0	.0	75.3	547
18021	9.9	1.3	7.8	.0	.0	.0	.0	18.8	104	.0	10.8	.2	.0	.0	70.2	554
TOT	208	23	154	0	0	0	0	16.5	379	0	212	8	2	1698	2299	
PCT	9.0	1.0	6.7	.0	.0	.0	.0			.0	9.2	.3	.1	.1	73.9	100.0

SEPTEMBER

PERIOD: (PRIMARY) 1943-1969  
(OVER-ALL) 1900-1969

AREA 0008 DUTCH HAR80R  
51-55N 165-172W

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+	00	03	06	09				12	15	18	21				
N	.4	1.8	2.1	1.4	.2	.0	7.2	6.0	5.8	6.9	4.8	2.3	6.4	1.5							
NNE	.2	1.1	1.4	.6	.1	.0	3.5	7.1	3.5	3.4	2.1	3.5	4.0	2.9							
NE	.2	1.7	1.6	.8	.1	.0	4.5	2.4	4.6	3.4	4.4	2.3	5.2	1.5							
ENE	.1	.5	1.3	.5	.1	.0	2.6	1.2	1.9	.0	3.1	3.5	3.1	4.4							
E	.3	1.5	1.8	.6	.3	.0	3.9	4.8	5.3	3.4	3.9	1.2	5.3	1.5							
ESE	.1	1.0	1.0	.7	*	*	3.2	6.0	2.7	5.2	2.5	3.5	2.7	1.5							
SE	.1	1.6	2.0	1.0	.4	.0	6.0	2.4	4.7	3.4	5.2	7.0	4.8	5.9							
SSE	.1	1.2	2.1	1.3	.1	.0	3.6	4.8	5.7	1.7	5.8	1.2	5.0	4.4							
S	.1	2.5	2.9	1.1	.5	.0	7.1	4.8	9.0	3.4	7.7	9.3	5.0	7.4							
SSW	.3	1.3	1.6	.7	.1	.0	3.8	3.6	4.1	3.4	4.0	1.2	5.3	2.9							
SW	.5	2.4	3.1	1.1	.1	*	7.1	4.8	7.1	8.6	7.3	11.6	7.1	8.8							
WSW	.2	1.8	4.0	1.0	.1	*	4.9	11.9	7.2	10.3	7.5	14.0	7.6	5.9							
W	.4	4.0	5.9	2.8	.5	.0	13.5	14.3	13.1	15.5	15.8	18.6	11.9	13.2							
WNW	.2	2.2	4.9	1.8	.2	.0	10.9	8.3	8.0	8.6	10.0	9.3	8.1	11.8							
NW	.3	2.5	4.7	1.9	.7	*	10.2	9.5	10.7	12.1	7.9	8.1	10.0	19.1							
NNW	.1	1.8	2.6	1.3	.4	.1	7.0	8.3	4.9	10.3	6.4	3.5	6.4	7.4							
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0							
CALM	1.5	808	1207	517	111	8	1.1	.0	1.9	.0	1.5	.0	2.1	.0							
TOT OBS	139	29.0	43.3	18.5	4.0	.3	718	84	636	58	519	86	621	68							
TOT PCT	5.0	29.0	43.3	18.5	4.0	.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0							

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-6	7-16	17-27	28-40	41+				00	03	06	09	12	15	18	21
N	1.7	3.8	2.7	1.1	.1	262	9.4	15.6	10.7	13.1	9.3	10.3	6.9	5.8	10.5	4.4
NE	1.5	2.7	2.3	.5	.1	196	7.0	15.0	7.1	3.6	6.4	3.4	7.5	5.8	8.2	5.9
E	1.4	3.2	2.2	.5	.1	205	7.3	15.0	7.1	10.7	8.0	8.6	6.4	4.7	8.1	2.9
SE	1.2	4.1	3.4	1.1	.1	276	9.9	16.7	9.6	7.1	10.4	5.2	11.0	8.1	9.8	10.3
S	1.6	5.1	3.3	1.0	.1	313	11.2	15.4	10.9	8.3	13.1	6.9	11.8	10.5	10.3	10.3
SW	1.9	7.4	4.1	.9	.1	402	14.4	14.8	12.0	16.7	14.3	19.0	14.8	25.6	14.7	14.7
W	2.4	10.9	7.2	2.3	.2	641	23.0	16.1	24.4	22.6	21.1	24.1	25.8	27.9	20.0	25.0
NW	1.8	7.3	4.7	2.1	.4	454	16.3	17.3	17.1	17.9	15.6	22.4	14.3	11.6	16.4	26.5
VAR	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.5	1242	833	267	30	41	1.5	.0	1.1	.0	1.9	.0	1.5	.0	2.1	.0
TOT OBS	418	44.5	29.9	9.6	1.1	2790	100.0	15.7	718	84	636	58	519	86	621	68
TOT PCT	15.0	44.5	29.9	9.6	1.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

SEPTEMBER

PERIOD: (PRIMARY) 1943-1969  
(OVER-ALL) 1900-1969

AREA 0008 DUTCH HARBOR  
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TABLE 4

HOUR	PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)									
	1-3	4-10	11-21	22-33	34-47	48+	CALM	MEAN	PCT FREQ	TOTAL OBS
0000	4.1	27.3	44.3	18.1	5.0	.2	1.0	16.2	100.0	802
0600	4.0	30.3	41.4	18.9	3.3	.4	1.7	15.4	100.0	694
1200	2.0	30.2	44.0	17.9	4.5	.2	1.3	15.6	100.0	605
1800	3.6	28.4	43.4	19.3	3.0	.3	1.9	15.3	100.0	689
TOT	98	808	1207	517	111	8	41	15.7		2790
PCT	3.5	29.0	43.3	18.5	4.0	.3	1.5		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

BY WIND DIRECTION

WIND DIR	PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)								TOTAL OBS	MEAN CLOUD COVER
	0-2	3-4	5-7	8-10	11-13	14-16	17-19	20-22		
N	.5	.2	2.1	3.0	117	6.5				
NNE	.1	.2	1.0	1.9	61	7.1				
NE	.2	.3	.7	2.9	79	7.1				
ENE	.1	.1	.3	2.3	53	7.5				
E	.1	.2	.5	3.3	80	7.4				
ESE	.0	.1	.7	2.0	53	7.6				
SE	.1	.2	.8	3.1	81	7.4				
SSE	.2	.1	.8	3.7	91	7.4				
S	.4	.4	1.4	5.5	147	7.1				
SSW	.1	.1	.5	3.3	77	7.5				
SW	.2	.5	1.7	4.3	127	7.1				
WSW	.6	.4	1.7	4.1	130	6.8				
W	.7	1.3	5.3	6.9	275	6.5				
WNW	.7	1.4	4.1	3.6	187	6.1				
NW	.4	1.4	4.1	3.7	189	6.2				
NNW	.3	1.0	2.5	3.3	134	6.5				
VAR	.0	.0	.0	.0	0	.0				
CALM	.0	.2	.3	1.1	30	7.3				
TOT OBS	97	157	542	1115	1911	6.8				
TOT PCT	5.1	8.2	28.4	58.3	100.0					

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)										TOTAL OBS	NH <5/8 ANY HGT	TOTAL OBS
	000	150	300	600	1000	2000	3500	5000	6500	8000 -			
N	.5	.1	.1	1.4	1.5	.4	.2	.1	.1	.0	.0	1.9	117
NNE	.1	.1	.2	.8	.9	.6	.1	.0	.0	.0	.0	.4	61
NE	.4	.1	.3	1.2	.9	.4	.0	.1	.0	.1	.0	.8	79
ENE	.4	.2	.1	.5	1.0	.1	.1	.0	.0	.0	.0	.4	53
E	.6	.2	.3	.8	1.3	.5	.0	.0	.0	.0	.0	.5	60
ESE	.5	.0	.1	.6	.9	.4	.0	.1	.1	.0	.0	.3	53
SE	1.2	.0	.1	.5	1.4	.2	.1	.0	.1	.1	.0	.6	81
SSE	1.4	.1	.2	.7	1.0	.6	.0	.1	.1	.0	.0	.6	91
S	1.6	.3	.2	1.7	2.0	.6	.0	.1	.1	.0	.0	1.2	147
SSW	.8	.0	.3	1.1	.9	.6	.1	.0	.0	.0	.0	.3	77
SW	.9	.1	.2	1.0	2.3	.8	.2	.0	.0	.0	.0	1.2	127
WSW	.4	.0	.3	1.5	2.0	1.0	.2	.0	.0	.0	.0	1.4	130
W	.9	.1	.7	2.7	3.6	2.8	.3	.1	.0	.0	.0	2.9	275
WNW	.6	.0	.3	1.4	2.7	1.3	.2	.0	.0	.1	.0	3.2	187
NW	.4	.0	.4	1.4	2.7	1.2	.7	.0	.1	.0	.0	3.0	189
NNW	.3	.1	.3	1.0	2.4	.8	.3	.0	.0	.0	.0	1.8	134
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.4	.1	.0	.2	.3	.1	.1	.1	.1	.1	.1	.4	30
TOT OBS	216	23	78	357	532	234	47	8	6	12	398		1911
TOT PCT	11.3	1.2	4.1	18.7	27.8	12.2	2.5	.4	.3	.6	20.8		100.0



PERIOD: (PRIMARY) 1943-1969

(OVER-ALL) 1900-1969

SEPTEMBER

AREA 0008

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DUTCH HARBOR

165-172W

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	.5	.6	.7	.8	.8	.8	.8	.8
= OR >5000	.7	.9	1.1	1.2	1.3	1.3	1.3	1.3
= OR >3500	2.5	3.3	3.5	3.7	3.7	3.7	3.7	3.7
= OR >2000	9.7	14.1	15.4	15.7	15.8	15.9	15.9	16.0
= OR >1000	22.8	36.6	42.3	43.4	43.5	43.7	43.8	43.9
= OR >600	28.6	50.2	59.4	61.4	62.1	62.4	62.5	62.6
= OR >300	29.9	52.8	63.1	65.3	66.1	66.5	66.6	66.7
= OR >150	30.1	53.5	64.1	66.4	67.3	67.7	67.8	67.9
= OR > 0	30.5	55.7	68.2	72.1	74.3	77.0	78.8	79.1
TOTAL	581	1061	1299	1374	1417	1467	1501	1507

TOTAL NUMBER OF OBS: 1906

PCT FREQ NH <5/8: 20.9

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

TOTAL								
	0	1	2	3	4	5	6	7
	8	9	10	11	12	13	14	15
1.6	2.8	5.5	6.2	5.3	6.4	9.7	13.3	38.7
							10.6	1979

SEPTEMBER

PERIOD: (PRIMARY) 1943-1969  
(OVER-ALL) 1900-1969

AREA 0008 DUTCH HARBOR  
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TABLE 8

IND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

PER ENT

VSBY (NM)	N	NNE	NE	E	ESE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	U	LM	TOTAL	PCT
PCP	* .0	* .0	* .0	* .1	* .0	* .1	* .1	* .0	* .0	* .3	* .0	* .0	* .0	* .0	* .0	* .0	13	.6
ND PCP	.1 .0	.0 .1	.1 .0	.3 .0	.2 .0	.8 .0	.3 .0	.5 .0	.4 .0	.3 .0	.2 .0	.3 .0	.3 .0	.0 .0	.0 .0	.2 .0	103	4.5
TOTAL	4	0	3	6	5	21	9	11	9	8	5	1	1	0	0	4	116	5.1
PCP	.2 .0	* .0	* .1	* .1	* .1	* .1	* .1	* .1	* .1	* .1	* .1	* .1	* .1	* .0	* .0	* .0	26	1.1
ND PCP	* .1	.0 .1	.0 .1	.2 .1	.1 .1	.1 .1	.3 .1	.3 .1	.1 .1	.3 .1	.2 .1	.1 .1	.0 .1	.0 .0	.0 .0	.0 .0	44	1.9
TOTAL	6	2	1	6	3	3	7	8	5	9	5	3	1	0	0	0	70	3.1
PCP	.1 .0	* .0	* .2	* .1	* .1	* .2	* .1	* .1	* .1	* .3	* .2	* .1	* .0	* .0	* .0	* .0	46	2.0
ND PCP	* .1	* .1	.1 .1	.1 .1	.1 .1	.2 .1	.1 .1	* .1	.0 .1	.3 .1	.2 .1	.2 .1	* .1	.0 .0	.0 .0	.2 .0	51	2.2
TOTAL	3	2	8	5	5	9	4	4	2	8	5	8	1	0	0	5	97	4.3
PCP	.2 .0	* .0	* .4	* .5	* .2	* .6	* .3	* .6	* .1	* .4	* .2	* .4	* .1	* .0	* .0	* .0	123	5.4
ND PCP	.3 .1	.2 .1	.5 .1	.1 .1	.2 .1	.9 .1	.8 .1	.7 .1	.7 .1	1.1 .1	.7 .1	.7 .1	.6 .1	.0 .0	.0 .0	.0 .0	193	8.5
TOTAL	11	11	21	15	9	34	25	29	20	35	19	24	16	0	0	1	316	13.9
PCP	.3 .0	* .0	* .3	* .6	* .4	* .7	* .3	* .3	* .5	* .7	* .4	* .3	* .1	* .0	* .0	* .0	138	6.1
ND PCP	1.8 .9	.9 .1	1.1 .1	1.1 .1	.5 .1	1.3 .1	.9 .1	1.7 .1	2.3 .1	4.4 .1	2.8 .1	3.0 .1	2.0 .1	.0 .0	.0 .0	.3 .0	598	26.3
TOTAL	47	27	31	37	19	44	27	45	64	117	72	75	48	0	0	6	736	32.4
PCP	.1 .0	* .0	* .0	* .1	* .1	* .2	* .0	* .1	* .1	* .2	* .1	* .1	* .1	* .0	* .0	* .0	32	1.4
ND PCP	3.0 .1	1.3 .1	1.4 .1	1.1 .1	1.1 .1	2.0 .1	1.1 .1	2.6 .1	2.8 .1	6.2 .1	5.0 .1	4.6 .1	3.6 .1	.0 .0	.0 .0	.6 .0	908	39.9
TOTAL	71	30	32	29	26	50	24	61	66	145	115	107	84	0	0	14	940	41.3
TOTAL	142	72	96	100	69	161	96	158	166	322	221	218	151	0	0	30	2275	100.0
PCT	6.2	3.2	4.2	4.4	3.0	7.1	4.2	6.9	7.3	14.2	9.7	9.6	6.6	.0	.0	1.3	100.0	

SEPTEMBER

PERIOD: (PRIMARY) 1943-1969  
(OVER-ALL) 1900-1969

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	*	*	.0	.0	.0	.1	.0	.0	.0	*	.0	.0	.0	.0	.0	.1	9	.3
	4-10	.1	.0	.1	.1	.1	.1	*	.2	.3	.1	.2	.1	.1	.1	*	.0	.0	.0	46	1.7
	11-21	*	.0	.0	.0	.1	.1	.3	.1	.4	.1	.1	.1	.1	.1	.0	*	.0	.0	49	1.8
	22+	*	.0	.0	.0	.1	.0	.1	.1	*	.1	*	.1	.1	.0	.0	.0	.0	.0	18	.7
	TOTAL	4	0	4	4	8	5	11	15	22	9	11	9	9	5	1	1	0	4	122	4.4
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	4-10	*	*	.0	.0	.1	.1	*	.1	.0	.1	.1	.1	.1	.0	*	.0	.0	.0	20	.7
	11-21	.0	.0	.0	.1	.1	.0	.1	.1	.1	*	.1	.1	.1	.1	.1	.0	.0	.0	28	1.0
	22+	.2	.0	*	*	*	.0	.1	.0	*	.1	*	*	.2	.1	*	.1	.0	.0	28	1.0
	TOTAL	6	2	1	3	6	2	6	3	3	7	8	6	11	6	4	2	0	0	76	2.7
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	5	.2
	4-10	*	*	*	.0	.1	.0	.1	*	.1	.0	.1	*	.0	*	.0	*	.0	.0	18	.7
	11-21	.0	.1	.2	.1	*	.2	.2	*	.2	.1	*	.1	.1	.1	.1	.0	.0	.0	41	1.5
	22+	.1	.0	.1	.2	.1	.1	.2	.2	.1	.1	*	.0	.1	.1	.3	.0	.0	.0	45	1.6
	TOTAL	3	3	8	7	6	9	14	7	10	4	5	3	8	6	10	1	0	5	109	3.9
2<5	0-3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	*	.0	.0	.0	*	4	.1
	4-10	.1	.2	.2	.1	.2	.1	.3	.1	.5	.3	.2	.1	.4	.1	.1	.2	.0	.0	86	3.1
	11-21	.1	.2	.3	.2	.3	.1	.4	.3	.3	.5	.4	.5	.5	.3	.2	.2	.0	.0	132	4.8
	22+	.2	.1	.4	.2	.1	.1	.3	.2	.6	.1	.5	.2	.6	.3	.6	.2	.0	.0	127	4.6
	TOTAL	14	14	23	13	15	9	25	16	39	26	29	24	40	19	25	17	0	1	349	12.6
5<10	0-3	.1	*	.0	.1	.1	*	.0	*	*	.1	.1	.0	.2	.1	.1	.1	.0	.4	41	1.5
	4-10	.3	.3	.5	.1	.3	.1	.4	.2	.6	.3	.5	.6	1.2	.6	.6	.6	.0	.0	204	7.4
	11-21	.7	.4	.6	.4	.7	.3	.4	.7	.7	.5	1.0	1.4	2.1	1.4	1.9	.8	.0	.0	386	14.0
	22+	.7	.3	.3	.2	.4	.5	.4	.5	.7	.3	.4	.4	1.1	.8	.9	.7	.0	.0	232	8.4
	TOTAL	51	31	37	20	41	25	33	39	54	32	57	68	128	80	96	60	0	11	863	31.2
10+	0-3	.2	.1	.2	*	.2	*	.1	*	*	.1	.4	.1	.3	*	.2	.1	.0	.7	77	2.8
	4-10	1.3	.5	.9	.3	.8	.6	.8	.6	1.0	.4	1.3	.8	2.1	1.4	1.7	1.0	.0	.0	428	15.5
	11-21	1.2	.7	.5	.5	.5	.4	.7	.8	1.3	.6	1.4	1.7	2.9	3.0	2.3	1.6	.0	.0	560	20.2
	22+	.5	.3	.1	*	.2	.1	.4	.3	.2	.2	.3	.4	1.2	.8	.9	.8	.0	.0	183	6.6
	TOTAL	87	46	49	25	46	32	55	48	70	35	93	86	181	142	141	93	0	19	1248	45.1
	TOTAL	165	96	122	72	122	82	144	128	198	113	203	196	377	258	277	174	0	40	2767	100.0
	PCT	6.0	3.5	4.4	2.6	4.4	3.0	5.2	4.6	7.2	4.1	7.3	7.1	13.6	9.3	10.0	6.3	.0	1.4	100.0	

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AREA 0008 DUTCH HARBOR  
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET,NH >4/8),AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000	150	300	600	1000	2000	3500	5000	6500	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
0000	8.6	1.3	3.3	16.7	25.3	11.4	4.0	.4	.6	1.1	72.7	27.3	545
0600	12.2	1.1	4.6	17.7	30.9	12.6	2.1	.4	.2	.4	82.3	17.7	475
1200	13.4	.7	3.2	22.3	25.7	11.6	1.6	.2	.0	.0	78.6	21.4	440
1800	11.3	1.7	5.2	17.7	27.9	12.7	1.9	.6	.4	.8	80.2	19.8	480
TOT	218	23	79	358	532	234	48	8	6	12	1518	422	1940
PCT	11.2	1.2	4.1	18.5	27.4	12.1	2.5	.4	.3	.6	78.2	21.8	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
0000	4.7	2.6	5.3	11.1	21.3	55.0	531
0600	5.0	1.7	3.4	13.1	31.7	45.0	464
1200	3.7	2.1	4.6	14.1	37.3	38.2	434
1800	5.5	2.5	3.4	14.3	27.0	47.4	477
TOT	90	43	80	249	551	893	1906
PCT	4.7	2.3	4.2	13.1	28.9	46.9	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET,NH >4/8),BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
0000	9.4	14.9	39.0	35.8	25.2	531
0600	12.1	18.5	42.9	41.4	15.7	464
1200	13.6	18.9	47.5	32.3	20.3	434
1800	11.5	19.7	44.7	36.9	18.4	477
TOT	220	341	825	698	383	1906
PCT	11.5	17.9	43.3	36.6	20.1	100.0

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TABLE 13

TEMP F	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP											TOTAL OBS	PCT FREQ
	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100					
65/69	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	1	.1
60/64	.0	.0	.1	.1	.2	.4	.5	.1	.1	.1	.1	23	1.4
55/59	.0	.0	.1	.1	.5	2.8	3.0	2.2	.5	.5	.5	143	8.6
50/54	.0	.0	.0	.2	3.0	6.2	16.9	15.3	.5	.5	.5	695	41.6
45/49	.0	.0	.0	.2	.8	7.8	14.7	18.9	.5	.5	.5	708	42.4
40/44	.0	.0	.0	.0	.0	.8	2.0	2.5	.0	.0	.0	98	5.9
35/39	.0	.0	.0	.0	.0	.0	.1	.1	.0	.0	.0	2	.1
TOTAL	0	0	2	9	84	201	622	652	.1	.1	.1	1670	100.0
PCT	.0	.0	.1	.5	5.0	18.0	37.2	39.0					

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP											N	NE	E	SE	S	SW	W	NW	VAR	CALM
TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100												
65/69	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
60/64	.0	.0	.1	.1	.2	.4	.5	.1	.1	.1	.0	.1	.2	.4	.2	.2	.2	.1	.0	.0
55/59	.0	.0	.1	.1	.5	2.8	3.0	2.2	.5	.5	.4	.1	1.1	1.5	1.8	1.9	1.0	.6	.0	.1
50/54	.0	.0	.0	.2	3.0	6.2	16.9	15.3	.5	.5	3.0	3.0	3.2	5.3	6.4	7.5	8.2	4.1	.0	.8
45/49	.0	.0	.0	.2	.8	7.8	14.7	18.9	.5	.5	5.0	3.2	3.5	2.2	2.6	4.4	11.1	9.7	.0	.7
40/44	.0	.0	.0	.0	.0	.8	2.0	2.5	.0	.0	.8	.6	.4	.2	.0	.5	1.9	1.4	.0	.0
35/39	.0	.0	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.0	.0
TOTAL	0	0	2	9	84	201	622	652	.1	.1	156	118	141	161	184	243	374	267	0	26
PCT	.0	.0	.1	.5	5.0	18.0	37.2	39.0			9.3	7.1	8.4	9.6	11.0	14.6	22.4	16.0	.0	1.6

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR											TOTAL OBS
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN			
00003	65	60	57	51	45	43	39	50.8			801
06009	63	58	55	49	45	43	41	49.5			693
12015	59	56	54	48	44	42	38	48.6			604
18021	64	57	55	49	44	42	39	49.1			688
TOT	65	59	55	50	45	42	38	49.6			2786

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR											TOTAL OBS
HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN				
00003	.0	1.0	9.2	21.4	38.3	30.1	84				499
06009	.0	.9	2.5	17.2	36.2	43.2	87				437
12015	.0	.3	3.1	15.9	37.6	43.1	88				327
18021	.0	.2	4.4	16.5	36.4	42.5	87				412
TOT	0	11	85	302	622	655	86				1675

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	37	41	45	49	53	57	61	TOT	W	WD
	40	44	48	52	56	60	64	FOG	FOG	FOG
14/16	.0	.0	.0	.0	.1	.2	.0	5	.1	.2
11/13	.0	.0	.0	.0	.1	.2	.1	6	.1	.2
9/10	.0	.0	.0	.2	.3	.2	.2	15	.2	.7
7/8	.0	.0	.1	.5	.6	.2	.0	25	.0	1.4
6	.0	.0	.3	.5	.7	.4	.0	35	.4	1.5
5	.0	.0	.3	.8	.9	.6	.0	47	.3	2.3
4	.0	.2	.8	1.6	2.0	.1	.0	86	.8	3.9
3	.0	.1	.6	2.5	1.8	.0	.0	90	.4	4.5
2	.0	.1	2.5	5.4	2.6	.2	.0	198	1.8	9.0
1	.0	.0	4.0	4.3	1.7	.1	.0	184	1.2	8.8
0	.0	.3	5.9	9.2	1.7	.0	.0	315	2.1	15.1
-1	.0	.8	4.3	5.3	.4	.0	.0	198	.5	10.3
-2	.0	.8	5.8	6.3	.8	.0	.0	250	.8	12.8
-3	.0	.5	2.2	2.1	.4	.0	.0	95	.5	4.7
-4	.1	.7	4.0	2.3	.1	.0	.0	132	.4	6.8
-5	.0	.6	2.2	.7	.1	.0	.0	66	.1	3.5
-6	.0	.1	1.0	.1	.0	.0	.0	23	.1	1.1
-7/-8	.1	.8	1.1	.2	.1	.0	.0	42	.1	2.2
-9/-10	.0	.5	.2	.2	.0	.0	.0	17	.0	.9
-11/-13	.1	.0	.1	.1	.0	.0	.0	4	.0	.2
TOTAL	3	99	650	776	261	40	4	1833	180	1653
PCT	.2	5.4	35.5	42.3	14.2	2.2	.2	100.0	9.8	90.2

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N					NE					TOTAL	48+	TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47					
<1	.2	.4	.0	.0	.0	.0	.4	.0	.0	.0	.5	.0	.0	.0	3
1-2	.2	1.0	.6	.0	.0	.0	.7	.7	.0	.0	15	.0	.0	.0	12
3-4	.2	1.2	1.1	.0	.0	.0	.2	.4	.2	.0	.0	.0	.0	.0	7
5-6	.0	.4	1.2	.7	.0	.0	.0	.6	.2	.0	19	.0	.0	.0	7
7	.0	.0	1.0	.6	.1	.0	.1	.7	.1	.1	14	.0	.0	.0	9
8-9	.0	.0	.0	.0	.1	.0	.0	.0	.1	.0	1	.0	.0	.0	1
10-11	.0	.0	.0	.1	.1	.0	.0	.0	.2	.1	2	.0	.0	.0	3
12	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	1	.0	.0	.0	0
13-16	.0	.0	.0	.1	.0	.0	.0	.0	.1	.0	1	.0	.0	.0	1
17-19	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	1	.0	.0	.0	0
20-22	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	1	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
TOTAL	6	24	32	15	4	0	12	20	10	2	81	0	0	0	44
PCT	.7	2.9	3.9	1.8	.5	.0	1.5	2.4	1.2	.2	9.8	.0	.0	.0	5.3

HGT	E					SE					TOTAL	48+	TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47					
<1	.0	.1	.0	.0	.0	.0	.1	.0	.0	.0	1	.0	.0	.0	1
1-2	.1	.6	.4	.0	.0	.0	.7	.1	.0	.0	9	.0	.0	.0	7
3-4	.0	.8	.7	.1	.0	.0	1.5	.6	.1	.0	14	.0	.0	.0	18
5-6	.0	.5	1.5	.6	.0	.0	.5	1.2	.6	.0	21	.0	.0	.0	19
7	.0	.1	.2	.0	.2	.0	.0	.8	.4	.0	5	.0	.0	.0	10
8-9	.0	.0	.4	.1	.1	.0	.0	.0	.6	.4	5	.0	.0	.0	8
10-11	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	0	.0	.0	.0	1
12	.0	.1	.0	.0	.0	.0	.0	.0	.1	.0	1	.0	.0	.0	1
13-16	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	0	.0	.0	.0	2
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	0	.0	.0	.0	2
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
TOTAL	1	19	26	7	3	0	23	26	17	3	56	0	0	0	69
PCT	.1	2.3	3.2	.8	.4	.0	2.8	3.2	2.1	.4	6.8	.0	.0	.0	8.4

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TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.0	.5	.0	.0	.0	.0	4	.0	.5	.0	.0	.0	.0	4
1-2	.0	.6	.2	.0	.0	.0	7	.0	.6	1.3	.0	.0	.0	16
3-4	.0	1.2	1.5	.0	.0	.0	22	.1	1.6	2.5	.1	.0	.0	36
5-6	.0	.5	1.5	.1	.0	.0	17	.0	.5	2.4	.0	.0	.0	24
7	.0	.0	1.0	.8	.0	.0	15	.0	.0	1.0	.6	.0	.0	13
8-9	.0	.0	.1	.2	.1	.0	4	.0	.0	.6	.4	.0	.0	8
10-11	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.1	.0	.0	1
12	.0	.0	.1	.0	.1	.0	2	.0	.0	.0	.0	.0	.0	0
13-16	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.2	.0	.0	2
17-19	.0	.0	.1	.0	.0	.0	1	.0	.0	.0	.1	.0	.0	1
20-22	.0	.0	.0	.0	.1	.0	1	.0	.0	.0	.1	.0	.0	1
23-25	.0	.0	.0	.0	.1	.0	1	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.1	.0	.0	1
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	.0	2.3	37	10	4	0	74	1	26	65	15	0	0	107
PCT	.0	2.8	4.5	1.2	.5	.0	9.0	.1	3.2	7.9	1.8	.0	.0	13.0

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	GRAND TOTAL
<1	.2	.8	.0	.0	.0	.0	9	.0	.4	.0	.0	.0	.0	3	30
1-2	.1	3.3	3.2	.0	.0	.0	53	.1	1.8	1.1	.0	.0	.0	25	144
3-4	.1	1.7	4.9	.7	.0	.0	61	.0	1.9	3.5	.4	.0	.0	48	227
5-6	.0	.7	4.9	.8	.0	.0	53	.0	.4	2.8	.6	.0	.0	31	191
7	.0	.0	1.7	.7	.0	.0	20	.0	.0	1.3	.6	.2	.0	18	104
8-9	.0	.0	.8	1.6	.1	.0	21	.0	.0	.5	1.0	.1	.0	13	61
10-11	.0	.0	.0	.2	.1	.0	4	.0	.1	.5	.2	.0	.0	7	18
12	.0	.0	.1	.4	.1	.0	3	.0	.0	.0	.4	.2	.0	5	13
13-16	.0	.0	.0	.4	.1	.0	4	.0	.0	.0	.6	.1	.0	6	16
17-19	.0	.0	.0	.4	.1	.0	4	.0	.1	.0	.0	.1	.0	2	10
20-22	.0	.0	.0	.1	.1	.0	2	.0	.0	.0	.0	.0	.0	0	7
23-25	.0	.0	.0	.0	.1	.0	1	.0	.0	.0	.0	.0	.0	0	2
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	1
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
TOTAL	3	54	128	44	6	0	235	1	39	80	31	7	0	158	824
PCT	.4	6.6	15.5	5.3	.7	.0	28.5	.1	4.7	9.7	3.8	.8	.0	19.2	100.0



PERIOD: (PRIMARY)  
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AREA 0008 DUTCH HARBOR  
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TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	1.4	3.1	.0	.0	.0	.0					38
1-2	.7	9.2	7.6	.0	.0	.0					146
3-4	.5	10.1	15.0	1.7	.0	.0					227
5-6	.0	3.4	15.8	3.7	.0	.0					191
7	.0	.2	7.7	3.8	.7	.0					104
8-9	.0	.0	2.4	4.0	1.0	.0					61
10-11	.0	.1	.6	1.1	.4	.0					18
12	.0	.1	.2	.8	.4	.0					13
13-16	.0	.0	.2	1.4	.2	.0					16
17-19	.0	.1	.1	.7	.2	.0					10
20-22	.0	.0	.0	.5	.4	.0					7
23-25	.0	.0	.0	.0	.2	.0					2
26-32	.0	.0	.0	.1	.0	.0					1
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	22	220	414	149	29	0					834
PCT	2.6	26.4	49.6	17.9	3.5	.0					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+ TOTAL	MEAN HGT	
<6	1.0	6.3	14.6	8.7	2.7	.8	1.0	.2	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	327	3
6-7	.0	1.2	6.0	10.1	7.8	3.2	2.3	.4	.4	.4	.2	.0	.0	.0	.0	.0	.0	.0	.0	295	6
8-9	.0	.3	.9	2.8	4.7	3.2	1.2	1.0	1.8	.5	.1	.1	.0	.0	.0	.0	.0	.0	.0	153	8
10-11	.0	.1	.1	.2	1.4	2.5	.8	.4	.8	.3	.8	.0	.1	.0	.0	.0	.0	.0	.0	69	10
12-13	.0	.0	.2	.1	.1	.5	.3	.5	.4	.1	.2	.0	.0	.0	.0	.0	.0	.0	.0	24	10
>13	.0	.0	.0	.0	.4	.1	.0	.2	.2	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	10	10
INDET	3.5	.1	.0	.3	.3	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	41	1
TOTAL	41	74	200	205	161	96	51	26	37	13	12	2	1	.0	.0	.0	.0	.0	.0	919	5
PCT	4.5	8.1	21.8	22.3	17.5	10.4	5.5	2.8	4.0	1.4	1.3	.2	.1	.0	.0	.0	.0	.0	.0	100.0	

OCTOBER

PERIOD: (PRIMARY) 1942-1969  
(OVER-ALL) 1900-1969

AREA 0006 DUTCH HARBOR  
51-55N 165-172W

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW	OTHER FRZN PCPN					FOG	SMOKE	DUST	BLWG	SIG WEA	
N	.2	.0	.5	.0	.1	.0	.0	.0	12	.0	.1	.1	.0	.0	5.8	114
NNE	.1	.1	.1	.0	.0	.0	.0	.3	5	.0	.1	.2	.0	.0	2.8	59
NE	.3	.1	.4	.0	.1	.0	.0	1.0	17	.0	.0	.1	.0	.0	1.8	50
ENE	.5	.1	.2	.0	.0	.0	.1	.7	13	.0	.0	.0	.0	.0	1.7	43
E	.8	.0	.5	.0	.1	.0	.0	1.4	24	.0	.1	.1	.0	.0	1.6	55
ESE	.9	.0	.2	.0	.0	.0	.0	1.0	18	.0	.0	.0	.0	.0	1.4	42
SE	1.0	.0	.4	.0	.0	.0	.0	1.4	25	.0	.1	.2	.0	.0	1.5	56
SSE	.4	.0	.5	.0	.0	.0	.0	.9	15	.0	.1	.1	.0	.0	1.6	45
S	1.0	.1	.4	.0	.0	.0	.0	1.5	26	.0	.3	.1	.1	.0	3.0	86
SSW	1.2	.1	.4	.0	.0	.0	.0	1.6	28	.0	.1	.0	.1	.1	2.4	72
SW	.9	.4	1.2	.0	.0	.0	.0	2.3	40	.0	.3	.1	.0	.0	5.3	140
WSW	.3	.5	.3	.0	.0	.0	.0	1.3	22	.0	.1	.1	.0	.0	5.8	125
W	1.6	.6	.7	.0	.1	.0	.1	3.1	53	.0	.3	.1	.1	.1	15.3	327
WNW	.6	.4	.2	.0	.3	.1	.1	1.7	30	.0	.2	.0	.0	.0	10.1	208
NW	.7	.3	.2	.0	.0	.0	.3	1.3	23	.0	.2	.0	.1	.1	9.0	184
NNW	.3	.2	.0	.0	.1	.1	.1	.6	11	.0	.1	.0	.0	.0	6.2	120
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
CALM	.1	.1	.0	.0	.0	.0	.0	.1	2	.0	.0	.1	.0	.0	.4	10
TOT OBS	191	48	105	0	11	2	14	.1	364	0	36	18	4	4	1314	1736
TOT PCT	11.0	2.8	6.0	.0	.6	.1	.8	21.0		.0	2.1	1.0	.2	.2	75.7	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW	OTHER FRZN PCPN					FOG	SMOKE	DUST	BLWG	SIG WEA	
00003	10.8	3.7	7.1	.0	.2	.2	.4	21.4	105	.0	3.1	1.4	.0	.0	74.1	490
06009	13.9	1.9	4.7	.0	.2	.0	1.2	21.9	93	.0	2.8	.9	.9	.9	73.4	425
12015	9.7	1.7	5.2	.0	.7	.2	.7	17.9	76	.0	.7	.7	.0	.0	80.7	424
18021	9.6	3.7	6.9	.0	1.5	.0	1.0	22.3	91	.0	1.7	1.0	.0	.0	75.0	408
TOT	192	48	105	0	11	2	14	20.9	365	0	37	18	4	4	1323	1747
PCT	11.0	2.7	6.0	.0	.6	.1	.8			.0	2.1	1.0	.2	.2	75.7	100.0

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PERIOD: (PRIMARY) 1942-1969  
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AREA 0008 DUTCH HARBOR  
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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)					
	0-3	4-10	11-21	22-33	34-47	48+	00	03	06	09				12	15	18	21		
N	.3	1.7	2.2	2.0	.7	*	164	6.8	18.8	5.7	4.0	7.5	7.0	7.0	9.1	6.5	11.8		
NNE	.1	.7	1.2	1.0	.3	*	81	3.4	19.7	3.1	1.3	2.9	.0	3.5	4.0	4.0	8.2		
NE	.2	.7	1.1	.9	.3	.0	74	3.1	18.5	2.9	6.7	3.5	7.0	2.5	4.0	2.3	1.2		
ENE	.0	.6	.6	.6	.3	.0	51	2.1	20.8	1.5	2.7	1.9	1.2	3.5	1.0	2.5	1.2		
E	.*	.5	.7	.8	.7	.1	69	2.9	24.3	2.6	4.0	3.3	1.2	2.0	6.1	2.9	3.5		
ESE	.0	.6	.5	.7	.3	.1	55	2.3	23.1	2.0	12.0	1.3	3.5	2.0	2.0	2.3	2.4		
SE	.2	.9	.9	1.1	.4	.0	85	3.5	18.5	4.2	1.3	4.4	4.7	2.5	2.0	2.9	4.7		
SSE	.*	.4	.9	.7	.1	.0	51	2.1	19.1	2.3	2.7	2.9	2.3	2.2	1.0	1.5	.0		
S	.1	1.3	1.7	.9	.4	.1	109	4.5	17.8	3.3	6.7	4.2	2.3	6.5	1.0	5.7	3.5		
SSW	.3	1.4	1.6	1.1	.3	.0	114	4.7	16.8	5.2	1.3	4.0	2.3	4.2	4.0	5.7	8.2		
SW	.6	1.8	4.3	2.1	.5	*	228	9.5	17.4	11.4	10.7	9.8	4.7	8.0	6.1	9.9	5.9		
WSW	.1	1.5	2.9	1.2	.5	.2	180	7.5	20.5	7.0	2.7	7.7	8.1	7.2	11.1	7.4	10.6		
W	.5	2.4	7.8	4.5	1.1	.2	409	17.0	19.8	19.8	16.0	16.0	15.1	16.9	15.2	16.5	11.8		
WNW	.3	1.5	4.4	3.6	1.0	.3	269	11.2	20.8	10.8	9.3	11.6	14.0	11.4	12.1	11.2	8.2		
NW	.3	2.4	4.7	4.5	.5	*	298	12.4	19.0	11.1	12.0	12.5	16.3	12.9	13.1	12.4	14.1		
NNW	.*	1.1	2.6	1.7	.6	.1	148	6.2	20.7	6.5	6.7	5.6	9.3	7.0	8.1	5.1	3.5		
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0		
CALM	.8	.0	.0	.0	.0	.0	19	.8	.0	.5	.0	.8	1.2	.7	.0	1.3	1.2		
TOT OBS	97	468	919	693	195	32	2404	100.0	19.4	612	75	519	86	402	99	526	85		
TOT PCT	4.0	19.5	38.2	28.8	8.1	1.3		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-6	7-16	17-27	28-40	41+				00	03	06	09	12	15	18	21
N	1.2	3.7	3.0	2.2	.1	245	10.2	19.1	8.8	5.3	10.4	7.0	10.4	13.1	10.5	20.0
NE	.6	1.9	1.2	1.2	.2	125	5.2	19.4	4.4	9.3	5.4	8.1	6.0	5.1	4.8	2.4
E	.3	1.7	1.2	1.4	.6	124	5.2	23.8	4.6	16.0	4.6	4.7	4.0	8.1	5.1	5.9
SE	.7	2.0	1.9	1.0	.1	136	5.7	18.8	6.5	4.0	7.3	7.0	4.7	3.0	4.4	4.7
S	1.2	3.6	2.8	1.5	.2	223	9.3	17.3	8.5	8.0	8.3	4.7	10.7	5.1	11.4	11.9
SW	2.1	5.7	6.0	2.3	.8	408	17.0	18.8	18.5	13.3	17.5	12.8	15.2	17.2	17.3	16.5
W	1.9	8.4	12.2	4.9	.8	678	28.2	20.2	30.6	25.3	27.6	29.1	28.4	27.3	27.8	20.0
NW	1.3	6.2	7.2	3.5	.4	446	18.6	19.6	17.6	18.7	18.1	25.0	19.9	21.2	17.5	17.6
VAR	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.8	.0	.0	.0	.0	19	.8	.0	.5	.0	.8	1.2	.7	.0	1.3	1.2
TOT OBS	245	794	854	430	81	2404		19.4	612	75	519	86	402	99	526	85
TOT PCT	10.2	33.0	35.5	17.9	3.4		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	1-3	4-10	11-21	WIND SPEED (KNOTS)				CALM	PCT	
				22-33	34-47	48+	MEAN		FREQ	OBS
00003	2.9	19.2	38.1	30.0	8.0	1.3	.4	19.4	100.0	687
06009	4.0	19.2	39.0	28.6	7.3	1.2	.8	19.0	100.0	605
12015	.8	17.2	40.3	29.9	9.2	2.0	.6	20.7	100.0	501
18021	4.9	21.9	35.8	26.8	8.2	1.0	1.3	18.5	100.0	611
TOT	78	468	919	693	195	32	19	19.4		2404
PCT	3.2	19.5	38.2	28.8	8.1	1.3	.8		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION							MEAN CLOUD COVER
	0-2	3-4	5-7	8 &	OBSCD	TOTAL OBS		
N	.8	.9	2.5	2.5		92	6.0	
NNE	.1	.3	1.2	1.4		42	6.5	
NE	.1	.1	.8	1.4		34	6.8	
ENE	.1	.1	.5	1.7		35	6.9	
E	.1	.1	.6	2.3		43	7.4	
ESE	.0	.0	.6	2.0		36	7.8	
SE	.1	.1	.6	2.4		44	7.3	
SSE	.0	.1	.5	1.7		33	7.4	
S	.2	.7	.9	2.0		65	6.8	
SSW	.2	.1	.9	2.8		57	7.2	
SW	.9	.6	2.0	3.8		100	6.4	
WSW	.4	.8	3.3	2.8		101	6.4	
W	1.7	3.4	7.5	6.3		262	5.9	
WNW	1.0	3.1	5.0	3.3		172	5.6	
NW	1.0	2.4	5.1	3.4		165	5.7	
NNW	.9	1.3	3.4	1.2		95	5.5	
VAR	.0	.0	.0	.0		0	.C	
CALM	.1	.0	.3	.2		8	6.6	
TOT OBS	110	195	492	587		1384	6.2	
TOT PCT	7.9	14.1	35.5	42.4		100.0		

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION										NH <5/8 ANY HGT	TOTAL OBS
	000	150	300	600	1000	2000	3500	5000	6500	8000+		
N	.1	.0	.2	1.2	2.4	.9	.1	.0	.0	.0	1.9	92
NNE	.2	.1	.1	.4	1.4	.4	.0	.1	.0	.0	.4	42
NE	.1	.0	.1	.4	1.2	.3	.0	.0	.0	.0	.4	34
ENE	.1	.1	.1	.8	.4	.4	.2	.0	.0	.0	.5	35
E	.5	.0	.0	.9	.8	.4	.0	.0	.0	.0	.6	43
ESE	.3	.0	.1	.7	.8	.4	.1	.0	.1	.0	.2	36
SE	.4	.0	.1	1.1	.7	.4	.0	.0	.0	.0	.4	44
SSE	.4	.0	.4	.6	.5	.3	.0	.0	.0	.0	.2	33
S	.5	.0	.6	.7	1.1	.5	.1	.0	.0	.1	1.2	65
SSW	.7	.0	.4	.9	.9	.4	.2	.0	.0	.0	.5	57
SW	.6	.0	.4	1.4	1.4	.8	.3	.0	.0	.0	2.4	100
WSW	.3	.0	.4	1.0	2.2	.9	.2	.0	.1	.0	2.1	101
W	.8	.1	.7	2.9	4.6	1.9	.6	.1	.0	.0	7.2	262
WNW	.1	.1	.5	2.7	2.9	.7	.3	.0	.0	.0	5.1	172
NW	.2	.0	.7	1.7	3.0	1.2	.3	.1	.1	.0	4.8	165
NNW	.1	.0	.2	1.1	1.7	.7	.1	.0	.0	.0	3.0	95
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.1	.0	.1	.1	.1	.1	.0	.0	.0	.0	.1	8
TOT OBS	73	6	68	255	359	148	34	5	3	2	43.1	1384
TOT PCT	5.3	.4	4.9	18.4	25.9	10.7	2.5	.4	.2	.1	31.1	100.0

OCTOBER

PERIOD: (PRIMARY) 1942-1969  
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AREA 0008 DUTCH HARBOR  
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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)									
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0		
= OR >6500	.3	.4	.4	.4	.4	.4	.4	.4		
= OR >5000	.6	.7	.7	.7	.7	.7	.7	.7		
= OR >3500	2.4	3.2	3.2	3.2	3.2	3.2	3.2	3.2		
= OR >2000	8.4	12.6	13.7	13.8	13.9	13.9	13.9	13.9		
= OR >1000	20.8	35.1	38.8	39.7	39.9	40.0	40.0	40.0		
= OR >600	26.6	49.0	56.1	57.9	58.2	58.5	58.5	58.5		
= OR >300	27.6	52.1	60.6	62.6	63.1	63.3	63.3	63.3		
= OR >150	27.6	52.3	60.9	63.0	63.5	63.7	63.7	63.7		
= OR > 0	27.8	54.3	64.1	67.0	68.2	68.9	69.0	69.0		
TOTAL	386	754	890	931	947	957	958	958		

TOTAL NUMBER OF OBS: 1389

PCT FREQ NH <5/8: 31.0

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

									TOTAL
									OBS
0	1	2	3	4	5	6	7	8	
1.1	3.7	7.6	9.9	8.2	8.1	13.3	13.7	30.1	4.4 1440

OCTOBER

PERIOD: (PRIMARY) 1942-1969  
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AREA 0008 DUTCH HARBOR  
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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.0	.0	.0	.0	.0	.0	.2	.1	.1	.1	.0	.0	.1	.1	.0	.0	.0	.0	9	.5
ND PCP	.1	.0	.0	.0	.1	.0	.0	.0	.3	.1	.2	.1	.1	.0	.0	.0	.0	.0	16	.9
TOTAL	1	0	0	0	1	0	3	1	6	3	4	2	3	1	0	0	0	0	25	1.4
PCP	.0	.0	.1	.0	.1	.0	.2	.1	.1	.1	.1	.1	.2	.0	.0	.0	.0	.0	17	1.0
ND PCP	.1	.0	.1	.0	.1	.0	.1	.0	.1	.0	.1	.1	.2	.1	.1	.0	.0	.0	13	.8
TOTAL	1	0	3	0	3	0	5	1	2	1	2	3	7	1	1	0	0	0	30	1.7
PCP	.1	.1	.0	.1	.3	.2	.1	.1	.2	.3	.2	.1	.3	.1	.2	.1	.0	.1	46	2.7
ND PCP	.0	.1	.0	.0	.0	.1	.0	.1	.1	.1	.1	.3	.1	.1	.2	.1	.0	.0	20	1.2
TOTAL	1	2	0	2	6	5	2	3	5	7	4	7	7	4	6	3	0	2	66	3.8
PCP	.3	.0	.3	.3	.2	.4	.5	.5	.4	.5	.5	.3	.8	.3	.2	.1	.0	.0	96	5.5
ND PCP	.5	.1	.1	.1	.2	.2	.3	.2	.4	.3	.8	.6	1.2	.8	.3	.7	.0	.0	116	6.7
TOTAL	14	2	7	7	7	11	13	11	14	14	21	15	34	18	10	14	0	0	212	12.2
PCP	.2	.2	.4	.3	.5	.5	.3	.1	.5	.6	1.1	.6	1.2	1.0	.5	.2	.0	.0	141	8.1
ND PCP	2.0	1.6	.8	.9	.8	.5	.9	.6	1.4	.9	2.4	2.1	6.9	3.2	3.2	2.0	.0	.1	526	30.4
TOTAL	39	31	21	22	23	17	20	12	34	26	61	47	139	72	64	37	0	2	667	38.5
PCP	.1	.1	.2	.0	.2	.0	.2	.1	.2	.0	.5	.1	.6	.3	.5	.2	.0	.0	56	3.2
ND PCP	3.3	1.3	.9	.7	.7	.5	.5	.9	1.2	1.2	2.3	2.8	7.3	6.1	5.4	3.6	.0	.3	677	39.1
TOTAL	58	25	19	12	15	9	12	17	25	21	48	50	137	112	102	65	0	6	733	42.3
TOTAL	114	60	50	43	55	42	55	45	86	72	140	124	327	208	183	119	0	10	1733	100.0
PCT	6.6	3.5	2.9	2.5	3.2	2.4	3.2	2.6	5.0	4.2	8.1	7.2	18.9	12.0	10.6	6.9	.0	.6	100.0	

## OCTOBER

PERIOD: (PRIMARY) 1942-1969  
(OVER-ALL) 1900-1969AREA 0008 DUTCH HARBOR  
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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	4-10	*	.0	.0	.0	.0	.0	.1	.0	.1	*	*	.0	*	.0	.0	.0	.0	.0	8	.3
	11-21	.0	*	.0	.0	.0	.0	*	.0	.2	.0	.1	*	*	.0	.0	.0	.0	.0	10	.4
	22+	.0	.0	.0	.0	*	.0	*	*	.0	.1	*	*	*	*	.0	.0	.0	.0	9	.4
	TOTAL	1	1	0	0	1	0	4	1	6	3	4	2	3	1	0	0	0	0	27	1.1
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	4-10	*	.0	*	*	*	.0	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	7	.3
	11-21	.0	.0	.1	.0	*	.0	.0	.0	*	*	*	.1	.2	.0	.0	.0	.0	.0	13	.5
	22+	.0	.0	.0	.0	*	.0	.2	*	*	.0	*	*	.1	*	.0	*	.0	.0	13	.5
	TOTAL	1	0	3	1	3	0	5	1	2	1	2	3	7	1	2	1	0	0	33	1.4
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	*	.1	.0	.0	.1	7	.3
	4-10	*	*	.0	*	.0	.0	.0	.0	.1	.0	*	.0	.0	.1	.0	.0	.0	.0	10	.4
	11-21	.0	.0	.0	.0	.0	*	.1	.0	*	.1	.1	.1	.1	.1	*	.1	.0	.0	20	.8
	22+	.0	.0	.0	*	.3	.1	*	.1	.1	.3	.2	.2	.2	.2	.2	.1	.0	.0	44	1.9
	TOTAL	1	2	0	2	6	5	3	3	6	10	5	8	8	9	7	4	0	2	81	3.4
2<5	0-3	*	*	.0	.0	.0	.0	*	.0	*	*	.1	.0	.1	.2	.0	*	.0	.1	17	.7
	4-10	.2	.0	.2	.1	.0	.0	*	.3	.1	.3	.1	.1	.2	.1	.3	.1	.0	.0	41	1.7
	11-21	.1	*	.2	*	.1	.2	.2	.2	.2	.2	.4	.2	.8	.3	.2	.2	.0	.0	84	3.5
	22+	.4	.0	.2	.2	.2	.3	.4	.3	.3	.2	.7	.6	.8	.5	.4	.4	.0	.0	139	5.9
	TOTAL	19	2	9	7	8	11	15	12	17	16	30	22	46	26	21	17	0	2	281	11.8
5<10	0-3	.1	.0	*	.0	*	.0	.1	.0	.1	.2	.1	*	.2	*	.1	.0	.0	.2	29	1.2
	4-10	.4	.3	.2	.3	.2	.2	.3	.1	.4	.7	.7	.6	.9	.4	.7	.4	.0	.0	150	6.3
	11-21	.5	.5	.5	.3	.3	.2	.3	.3	.7	.3	1.4	.8	3.0	1.4	1.3	.7	.0	.0	303	12.8
	22+	1.3	.8	.6	.5	.7	.4	.6	.1	.6	.5	1.3	1.2	2.9	2.0	1.9	1.0	.0	.0	392	16.5
	TOTAL	54	40	31	24	30	19	32	12	42	38	86	61	165	92	96	48	0	4	874	36.8
10+	0-3	.2	*	.1	.0	.0	.0	.1	*	.0	.1	.4	.1	.1	*	.1	.0	.0	.5	44	1.9
	4-10	.9	.3	.4	.2	.3	.3	.4	.2	.6	.8	1.0	.8	1.3	.9	1.4	.7	.0	.0	249	10.5
	11-21	1.6	.6	.4	.3	.2	.1	.3	.5	.5	.5	2.1	1.6	3.8	2.7	3.1	1.6	.0	.0	474	20.0
	22+	1.0	.5	.4	.3	.3	.4	.3	.2	.3	.2	.5	.8	2.4	2.2	2.4	.9	.0	.0	309	13.0
	TOTAL	88	36	31	17	19	18	25	21	35	39	95	79	179	138	168	77	0	11	1076	45.4
TOTAL		163	81	74	51	67	53	84	50	108	109	222	175	408	267	294	147	0	19	2372	100.0
PCT		6.9	3.4	3.1	2.2	2.8	2.2	3.5	2.1	4.6	4.6	9.4	7.4	17.2	11.3	12.4	6.2	.0	.8	100.0	

OCTOBER

PERIOD: (PRIMARY) 1942-1969  
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AREA 0008 DUTCH HARBOR  
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8), AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	4.3	.8	4.3	16.3	29.1	11.0	3.1	.5	.3	.3	69.9	30.1	392
06009	7.8	.3	4.2	18.0	24.6	11.4	2.1	.3	.6	.0	69.4	30.6	333
12015	4.8	.0	6.0	18.9	23.4	8.7	1.8	.0	.0	.3	64.0	36.0	333
18021	4.4	.6	5.0	20.8	25.7	11.4	2.6	.6	.0	.0	71.1	28.9	342
TOT	74	6	68	258	362	149	34	5	3	2	961	439	1400
PCT	5.3	.4	4.9	18.4	25.9	10.6	2.4	.4	.2	.1	68.0	31.4	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	1.5	1.8	3.3	10.0	28.4	55.0	391
06009	1.2	.9	4.3	12.2	39.6	41.8	328
12015	.9	1.8	2.4	11.2	38.2	45.5	330
18021	.0	.9	1.8	12.9	32.4	52.1	340
TOT	13	19	41	160	477	679	1389
PCT	.9	1.4	3.0	11.5	34.3	48.9	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET, NH >4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00003	4.3	10.5	32.2	39.9	27.9	391
06009	7.6	12.8	37.5	34.5	28.0	328
12015	4.8	12.4	38.2	28.5	33.3	330
18021	4.4	10.3	36.8	36.5	26.8	340
TOT	73	159	500	487	402	1389
PCT	5.3	11.4	36.0	35.1	28.9	100.0



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TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
55/59	.0	.0	.0	.0	.1	.2	.2	.0	7	.4
50/54	.0	.0	.0	.1	1.3	1.3	3.1	1.8	124	7.6
45/49	.0	.0	.1	.4	2.4	11.9	18.6	14.2	779	47.6
40/44	.0	.0	.1	.5	3.4	10.2	11.7	10.9	603	36.8
35/39	.0	.0	.0	.3	.9	1.6	2.3	2.1	117	7.1
30/34	.0	.0	.0	.0	.1	.1	.1	.2	7	.4
TOTAL	0	0	3	23	133	414	587	477	1637	100.0
PCT	.0	.0	.2	1.4	8.1	25.3	35.9	29.1		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
55/59	.0	.1	.0	.0	.0	.1	.1	.1	.0	.0
50/54	.2	.4	.6	.9	.9	2.4	1.8	.3	.0	.0
45/49	3.7	2.4	2.4	2.9	5.9	9.6	13.0	7.5	.0	.2
40/44	4.3	2.1	1.9	2.0	2.1	4.9	10.2	8.8	.0	.4
35/39	1.2	.8	.4	.1	.2	.2	2.1	2.0	.0	.2
30/34	.3	.0	.0	.0	.0	.0	.0	.1	.0	.0
TOTAL	160	94	87	97	149	284	445	308	0	13
PCT	9.8	5.7	5.3	5.9	9.1	17.3	27.2	18.8	.0	.8

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	58	54	52	46	40	36	34	45.8	684
06009	56	54	51	45	38	36	32	44.8	606
12015	52	51	49	45	38	34	32	44.3	502
18021	54	52	50	45	38	36	34	44.3	610
TOT	58	54	50	45	39	36	32	44.9	2402

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	1.9	1.3	25.1	35.7	26.1	82			479
06009	.0	1.9	7.0	26.1	33.6	31.4	84			417
12015	.0	1.6	6.5	24.4	38.1	29.3	84			307
18021	.0	.9	6.8	25.6	36.3	30.4	84			438
TOT	0	26	133	416	587	479	83			1641

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	29	33	37	41	45	49	53	TOT	W FOG	WD FOG
7/8	.0	.0	.0	.1	.3	.0	.1	6	.0	.4
6	.0	.0	.0	.0	.4	.1	.1	9	.0	.6
5	.0	.0	.0	.0	.1	.6	.3	16	.0	1.0
4	.0	.0	.0	.4	.8	1.1	.1	37	.1	2.2
3	.0	.0	.2	.3	1.5	1.3	.1	54	.1	3.4
2	.0	.0	.0	.6	5.2	2.8	.1	138	.4	8.3
1	.0	.0	.1	1.0	5.1	1.2	.0	117	.3	7.1
0	.0	.0	.3	3.7	9.3	1.9	.1	242	.4	14.9
-1	.0	.0	.3	4.0	4.9	1.5	.0	170	.1	10.7
-2	.0	.1	.6	5.4	5.9	.5	.0	198	.3	12.3
-3	.0	.1	.4	3.1	2.1	.1	.0	93	.1	5.8
-4	.0	.0	.5	4.1	4.2	.1	.0	141	.1	8.8
-5	.0	.1	1.8	4.2	2.2	.1	.0	135	.1	8.5
-6	.0	.1	1.1	2.0	.6	.0	.0	62	.0	3.9
-7/-8	.1	.4	2.7	2.3	1.0	.0	.0	102	.1	6.4
-9/-10	.0	.4	.9	.8	.1	.0	.0	35	.0	2.2
-11/-13	.1	.3	.5	.4	.0	.0	.0	21	.0	1.3
-14/-16	.0	.3	.1	.0	.0	.0	.0	6	.1	.3
TOTAL	2	28	152	512	694	180	14	1582	31	1551
PCT	.1	1.8	9.6	32.4	43.9	11.4	.9	100.0	2.0	98.0

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N					NE					48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47		
<1	.1	.3	.0	.0	.0	.0	.1	.0	.0	.0	.0	1
1-2	.0	.3	.1	.0	.0	.0	.0	.3	.0	.0	.0	2
3-4	.0	.9	1.2	.7	.0	.0	.4	.3	.7	.0	.0	10
5-6	.1	.3	.6	.6	.1	.0	.0	.6	.3	.0	.0	6
7	.0	.1	1.0	.7	.0	.0	.0	.3	.4	.3	.0	7
8-9	.0	.0	.4	.3	.0	.0	.0	.0	.1	.0	.0	1
10-11	.0	.0	.3	.3	.1	.0	.0	.0	.1	.0	.0	1
12	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0	.0	0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	2
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	2	13	25	19	3	0	4	10	12	6	0	32
PCT	.3	1.9	3.7	2.8	.4	.0	.6	1.5	1.8	.9	.0	4.7

HGT	E					SE					48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47		
<1	.1	.0	.0	.0	.0	.0	.6	.0	.0	.0	.0	4
1-2	.0	.0	.4	.0	.0	.0	.1	.3	.0	.0	.0	3
3-4	.0	.3	.4	.3	.0	.0	.0	.4	.3	.0	.0	5
5-6	.0	.0	.0	.1	.1	.0	.0	.9	1.2	.1	.0	15
7	.0	.0	.1	.9	.0	.0	.0	.0	.6	.0	.0	4
8-9	.0	.0	.0	.4	.0	.0	.0	.1	.6	.3	.0	7
10-11	.0	.0	.0	.1	.1	.0	.0	.0	.0	.1	.0	1
12	.0	.0	.1	.0	.0	.0	.0	.0	.1	.0	.0	1
13-16	.0	.0	.0	.0	.6	.0	.0	.1	.0	.1	.0	2
17-19	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.3	.0	.0	.0	.0	.1	.0	1
23-25	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	1	2	8	14	9	0	5	13	19	6	0	43
PCT	.1	.3	1.2	2.1	1.3	.0	.7	1.9	2.8	.9	.0	6.4

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S										SW										48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47										
<1	.0	.0	.0	.0	.0	.0	0	.0	.4	.0	.0	.0	.0	.0	.0	3						
1-2	.1	.3	1.0	.0	.0	.0	10	.0	.1	1.5	.0	.0	.0	.0	.0	17						
3-4	.0	.4	1.0	.6	.0	.0	14	.0	.6	1.8	.4	.0	.0	.0	.0	19						
5-6	.0	.1	1.0	.3	.1	.0	11	.0	.1	1.9	1.0	.0	.0	.0	.0	21						
7	.0	.0	.3	.4	.0	.0	5	.0	.1	1.3	.7	.0	.0	.0	.0	15						
8-9	.0	.0	.0	.4	.1	.0	4	.0	.0	.4	.4	.0	.0	.0	.0	6						
10-11	.0	.0	.1	.0	.0	.0	1	.0	.0	.1	.3	.3	.0	.0	.0	5						
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.1	.3	.0	.0	.0	.0	3						
13-16	.0	.0	.0	.3	.0	.0	2	.0	.0	.0	.7	.0	.0	.0	.0	5						
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.1	.0	.0	.0	1						
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0						
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0						
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0						
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0						
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0						
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0						
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0						
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0						
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0						
TOTAL	1	6	24	14	2	0	47	0	10	49	27	3	0	89	0	0						
PCT	.1	.9	3.5	2.1	.3	.0	6.9	.0	1.5	7.2	4.0	.4	.0	13.1	.0	0						

HGT	W										NW										48+	TOTAL	GRAND TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47											
<1	.0	.3	.0	.0	.0	.0	2	.0	.1	.0	.0	.0	.0	.0	.0	1	15						
1-2	.0	1.0	2.2	.0	.0	.0	22	.0	1.3	1.8	.0	.0	.0	.0	.0	21	75						
3-4	.0	1.2	4.0	.6	.0	.0	39	.0	.1	2.2	.3	.0	.0	.0	.0	18	131						
5-6	.0	.6	4.6	1.3	.0	.0	44	.0	.3	2.7	2.4	.1	.0	.0	.0	37	148						
7	.0	.1	4.6	3.0	.3	.0	54	.0	.0	1.8	1.0	.3	.0	.0	.0	21	126						
8-9	.0	.1	1.0	1.6	.0	.0	19	.0	.3	.6	1.3	.0	.0	.0	.0	15	60						
10-11	.0	.0	1.2	1.8	.0	.0	20	.0	.1	.1	.9	.0	.0	.0	.0	8	43						
12	.0	.0	.4	.6	.3	.0	7	.0	.0	.0	.9	.1	.0	.0	.0	7	21						
13-16	.0	.0	.0	.7	.3	.0	11	.0	.0	.1	1.0	.0	.0	.0	.0	8	37						
17-19	.0	.0	.0	.1	.3	.0	3	.0	.0	.0	.0	.0	.0	.0	.0	0	5						
20-22	.0	.0	.0	.0	.3	.0	2	.0	.0	.0	.1	.0	.0	.0	.0	1	6						
23-25	.0	.0	.0	.3	.1	.0	3	.0	.0	.0	.3	.1	.0	.0	.0	3	7						
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.1	.0	.0	.0	.0	1	3						
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0	0						
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0	0						
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0	0						
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0	0						
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0	0						
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0	0						
TOTAL	0	23	123	68	11	1	226	0	16	63	57	.5	.0	141	.0	0	677						
PCT	.0	3.4	18.2	10.0	1.6	.1	33.4	.0	2.4	9.3	8.4	.7	.0	20.8	.0	.0	100.0						

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1969

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AREA 0006 DUTCH HARBOR  
51-55N 165-172W

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)								TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+			
<1	.6	1.9	.0	.0	.0	.0			17
1-2	.1	3.2	7.7	.0	.0	.0			75
3-4	.0	4.0	11.3	4.0	.0	.0			131
5-6	.1	1.5	12.2	7.2	.7	.0			148
7	.0	.4	9.4	7.8	.9	.0			126
8-9	.0	.4	2.7	5.3	.4	.0			60
10-11	.0	.1	1.9	3.5	.7	.0			43
12	.0	.0	.4	2.1	.6	.0			21
13-16	.0	.0	.7	2.8	1.3	.6			37
17-19	.0	.0	.0	.1	.6	.0			5
20-22	.0	.0	.0	.1	.7	.0			6
23-25	.0	.0	.0	.7	.3	.0			7
26-32	.0	.0	.0	.1	.3	.0			3
33-40	.0	.0	.0	.0	.0	.0			0
41-48	.0	.0	.0	.0	.0	.0			0
49-60	.0	.0	.0	.0	.0	.0			0
61-70	.0	.0	.0	.0	.0	.0			0
71-86	.0	.0	.0	.0	.0	.0			0
87+	.0	.0	.0	.0	.0	.0			0
TOTAL	6	79	315	230	45	4			679
PCT	.9	11.6	46.4	33.9	6.6	.6			100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.4	3.3	9.7	6.0	4.0	1.2	1.5	.7	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	206	4
6-7	.0	.8	3.6	8.5	7.7	5.2	3.0	.8	1.7	.5	.4	.1	.1	.0	.0	.0	.0	.0	.0	242	7
8-9	.0	.1	.7	2.8	5.6	3.9	3.2	.5	1.9	.7	.3	.3	.1	.0	.0	.0	.0	.0	.0	150	8
10-11	.0	.0	.3	.3	1.6	2.8	2.0	1.6	1.2	.5	.0	.7	.4	.0	.0	.0	.0	.0	.0	85	11
12-13	.0	.0	.0	.0	.1	.5	1.2	.7	.3	.1	.5	.5	.1	.0	.0	.0	.0	.0	.0	31	13
>13	.0	.0	.0	.1	.0	.3	.0	.4	.1	.1	.0	.0	.1	.0	.0	.0	.0	.0	.0	9	12
INDET	2.3	.0	.1	.0	.3	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	21	1
TOTAL	20	33	107	132	144	104	81	35	44	15	9	13	7	0	0	0	0	0	0	744	7
PCT	2.7	4.4	14.4	17.7	19.4	14.0	10.9	4.7	5.9	2.0	1.2	1.7	.9	.0	.0	.0	.0	.0	.0	100.0	

NOVEMBER

PERIOD: (PRIMARY) 1942-1969  
(OVER-ALL) 1901-1969

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
				FRZG	PCPN	SNOW	OTHER FRZN PCPN				FOG	SMOKE	DUST	NO SIG WEA	
N	.8	.1	.6	.0	.0	.8	.0	.1	30	.0	.0	.0	.0	4.4	92
NNE	.4	.0	.4	.0	.0	.0	.0	.0	11	.0	.0	.0	.0	2.1	40
NE	.4	.1	.6	.0	.0	.3	.0	.1	22	.0	.1	.0	.0	2.8	63
ENE	.4	.0	.1	.0	.0	.1	.0	.0	10	.0	.0	.0	.0	2.4	44
E	.4	.0	.4	.0	.0	.2	.0	.0	13	.0	.2	.1	.0	3.0	59
ESE	.4	.0	.4	.0	.0	.1	.0	.0	12	.0	.1	.1	.0	1.3	33
SE	.9	.0	.8	.0	.0	.1	.0	.0	25	.0	.5	.0	.0	2.7	70
SSE	.5	.1	.7	.0	.0	.0	.0	.1	19	.0	.1	.1	.0	3.4	69
S	1.1	.1	.9	.0	.0	.1	.0	.0	31	.0	.2	.0	.0	5.3	109
SSW	.7	.1	.3	.0	.0	.1	.0	.0	16	.0	.3	.0	.0	4.6	85
SW	.9	.0	.5	.0	.0	.2	.0	.0	22	.0	.0	.0	.0	5.3	97
WSW	.8	.1	.1	.0	.0	.4	.0	.1	20	.1	.4	.0	.0	7.0	125
W	.6	.8	.4	.0	.0	.6	.0	.1	32	.0	.4	.0	.0	13.3	225
WNW	.2	.3	.1	.0	.0	.3	.1	.0	13	.0	.1	.0	.0	6.1	100
NW	.2	.1	.4	.0	.0	.4	.0	.0	14	.1	.1	.0	.0	7.0	115
NNW	.3	.2	.3	.0	.0	.2	.0	.2	16	.0	.1	.0	.0	4.3	78
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
CALM	.1	.0	.0	.0	.0	.0	.0	.0	1	.0	.0	.0	.0	.5	8
TOT OBS	129	29	97	.0	.0	56	1	11	307	2	33	3	0	1067	1412
TOT PCT	9.1	2.1	6.9	.0	.0	4.0	.1	.8	21.7	.1	2.3	.2	.0	75.5	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
				FRZG	PCPN	SNOW	OTHER FRZN PCPN				FOG	SMOKE	DUST	NO SIG WEA	
0003	9.1	2.5	5.8	.0	.0	4.5	.3	1.0	88	.0	2.0	.3	.0	75.6	397
0609	8.6	1.1	5.1	.0	.0	4.0	.0	.6	67	.3	2.9	.3	.0	77.4	350
12015	7.6	1.8	6.7	.0	.0	2.9	.0	.6	64	.0	2.9	.0	.0	78.4	342
18021	11.7	2.7	9.9	.0	.0	4.2	.0	.9	90	.3	1.8	.3	.0	70.6	333
TOT	131	29	97	.0	.0	56	1	11	309	2	34	3	0	1074	1422
PCT	9.2	2.0	6.8	.0	.0	3.9	.1	.8	21.7	.1	2.4	.2	.0	75.5	100.0

NOVEMBER

PERIOD: (PRIMARY) 1942-1969  
(OVER-ALL) 1901-1969

AREA 0006 DUTCH HARBOR  
51-55N 165-172W

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)				
	0-3	4-10	11-21	22-33	34-47	00	03	06	09	12					15	18	21		
N	.1	1.3	2.7	1.5	.5	.3	119	6.3	20.7	7.1	7.4	7.2	2.0	6.4	4.2	4.8	10.9		
NNE	.3	.5	1.1	.6	.3	.0	51	2.7	18.0	2.7	.0	2.6	6.1	1.9	4.2	3.1	4.3		
NE	.3	1.0	1.3	1.3	.4	.0	81	4.3	18.8	5.3	3.7	5.8	.0	3.2	1.4	4.0	.0		
ENE	.1	.5	1.2	1.1	.2	.1	57	3.0	20.3	2.7	3.7	3.0	6.1	2.2	.0	4.3	2.2		
E	.2	.9	1.9	.6	.2	.0	71	3.8	16.5	3.9	3.7	4.0	4.1	4.5	4.2	2.9	4.3		
ESE	.2	.5	.7	.6	.3	.0	44	2.3	19.2	2.9	1.9	2.1	.0	1.9	4.2	2.4	2.2		
SE	.2	1.2	2.2	1.1	.3	.1	94	5.0	17.8	4.9	7.4	5.3	8.2	4.8	1.4	5.2	2.2		
SSE	.1	1.4	1.7	1.3	.5	.1	94	5.0	19.2	4.1	1.9	4.7	2.0	6.7	6.9	5.7	4.3		
S	.3	1.7	3.0	2.0	.7	.1	145	7.7	18.9	8.2	9.3	7.4	.0	8.6	6.9	7.9	6.5		
SSW	.1	1.2	2.1	1.2	1.0	.0	104	5.5	20.2	4.7	7.4	5.8	2.0	6.1	2.8	6.2	8.7		
SW	.6	2.0	2.6	2.1	.9	.1	156	8.3	18.7	8.2	7.4	9.5	10.2	7.0	15.3	6.9	8.7		
WSW	.1	1.3	2.8	2.6	1.3	.1	154	8.2	22.7	9.6	7.4	7.4	12.2	8.0	9.7	6.7	10.9		
W	.5	2.5	4.4	5.1	1.9	.2	273	14.6	21.7	13.5	9.3	14.2	12.2	17.2	15.3	15.2	13.0		
WNW	.2	1.3	2.8	2.4	.9	.0	142	7.6	21.1	6.7	5.6	7.0	16.3	7.0	11.1	8.3	6.5		
NW	.3	2.0	3.1	2.1	1.5	.1	182	9.7	20.2	10.4	11.1	9.8	14.3	8.6	5.6	9.8	8.7		
NNW	.0	1.0	1.7	1.6	.7	.0	94	5.0	21.4	4.5	9.3	3.7	4.1	5.7	6.9	5.7	4.3		
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0		
CALM	.7	376	662	524	215	20	14	.7	.0	.8	3.7	.5	.0	.3	.0	1.0	2.2		
TOT OBS	78	20.1	35.3	27.9	11.5	1.1	1875	100.0	19.9	490	54	430	49	314	72	420	46		
TOT PCT	4.2	20.1	35.3	27.9	11.5	1.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)					
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD	00	03	06	09	12	15	18	21
N	1.1	2.8	3.0	1.7	.4	170	9.1	19.9	9.8	7.4	9.8	8.2	8.3	8.3	7.9	15.2
NE	1.0	2.0	2.8	1.5	.1	138	7.4	19.4	8.0	7.4	8.8	6.1	5.4	1.4	8.3	2.2
E	.9	2.2	2.0	1.0	.1	115	6.1	17.5	6.7	5.6	6.0	4.1	6.4	8.3	5.2	6.5
SE	1.1	4.1	2.7	1.8	.4	188	10.0	18.5	9.0	9.3	10.0	10.2	11.5	8.3	11.0	6.5
S	1.1	5.2	3.8	2.6	.6	249	13.3	19.5	12.9	16.7	13.3	2.0	14.6	9.7	14.0	15.2
SW	1.9	4.3	5.3	4.3	.7	310	16.5	20.7	17.8	14.8	17.0	22.4	15.0	25.0	13.6	19.6
W	2.1	5.8	7.6	5.4	1.2	415	22.1	21.5	20.2	14.8	21.2	28.6	24.2	26.4	23.6	19.6
NW	1.1	5.3	4.2	3.7	.4	276	14.7	20.6	14.9	20.4	13.5	18.4	14.3	12.5	15.5	13.0
VAR	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.7	595	589	412	74	14	.7	.0	.8	3.7	.5	.0	.3	.0	1.0	2.2
TOT OBS	205	31.7	31.4	22.0	3.9	1875	19.9		490	54	430	49	314	72	420	46
TOT PCT	10.9	31.7	31.4	22.0	3.9	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	1-3	4-10	11-21	WIND SPEED (KNOTS)			CALM	PCT	
				22-33	34-47	48+		MEAN	TOTAL
00003	3.1	19.7	33.5	28.7	12.9	1.1	1.1	20.3	100.0
06009	4.2	21.9	34.9	27.8	10.0	.8	.4	19.4	100.0
12015	1.8	17.9	38.9	27.7	11.7	1.8	.3	20.9	100.0
18021	4.3	20.4	35.0	27.5	11.2	.6	1.1	19.3	100.0
TOT	64	376	662	524	215	20	14	19.9	1875
PCT	3.4	20.1	35.3	27.9	11.5	1.1	.7	100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION							TOTAL	OBS	MEAN
	0-2	3-4	5-7	8-10	11-14	15-18	19-24			
N	.4	.4	2.6	2.2	6.0	6.5		60		
NNE	.2	.4	.9	1.7	34	6.7		34		
NE	.2	.3	1.8	1.8	43	6.6		43		
ENE	.4	.1	1.1	1.8	36	6.4		36		
E	.4	.4	1.3	1.9	42	6.5		42		
ESE	.2	.1	.1	1.7	22	7.0		22		
SE	.5	.0	.7	2.2	37	6.8		37		
SSE	.7	.5	.6	3.7	59	6.5		59		
S	.6	.6	1.4	4.2	73	6.7		73		
SSW	.8	.8	1.4	3.1	66	6.2		66		
SW	.4	.7	2.4	2.7	67	6.3		67		
WSW	1.0	2.4	3.3	2.5	100	5.5		100		
W	2.3	3.1	7.7	4.1	186	5.5		186		
WNW	.8	1.6	3.8	2.2	91	5.7		91		
NW	.6	1.7	3.4	3.1	94	6.0		94		
NNW	.5	.7	2.0	2.6	63	6.3		63		
VAR	.0	.0	.0	.0	0	.0		0		
CALM	.2	.1	.2	.2	7	4.9		7		
TOT OBS	108	150	375	447	1080	6.1				
TOT PCT	10.0	13.9	34.7	41.4	100.0					

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION									
WIND DIR	000	149	150	299	300	599	600	1000	2000
N	.6	.6	.0	.0	.3	.3	1.1	1.7	.6
NNE	.4	.4	.0	.0	.1	.1	.7	1.1	.1
NE	.0	.0	.0	.0	.1	.1	.6	1.6	.5
ENE	.1	.1	.0	.0	.3	.3	.8	.6	.6
E	.3	.3	.0	.0	.0	.0	.9	1.4	.4
ESE	.3	.3	.0	.0	.3	.3	.3	.6	.2
SE	.6	.6	.0	.0	.3	.3	.5	.9	.3
SSE	1.1	1.1	.1	.1	.4	.4	1.0	.9	.5
S	1.2	1.2	.1	.1	.2	.2	1.8	1.6	.4
SSW	.8	.8	.0	.0	.2	.2	.6	1.5	1.0
SW	.5	.5	.1	.1	.2	.2	1.5	1.8	.4
WSW	.5	.5	.0	.0	.3	.3	1.0	2.0	1.2
W	.2	.2	.1	.1	.8	.8	2.8	4.0	2.0
WNW	.3	.3	.2	.2	.1	.1	.7	2.6	1.5
NW	.2	.2	.2	.2	.0	.0	1.9	2.2	1.0
NNW	.3	.3	.2	.2	.2	.2	1.0	1.6	.6
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.0	.0	.0	.0	.2	.0	.0
TOT OBS	77	77	10	10	39	39	189	281	120
TOT PCT	7.1	7.1	.9	.9	3.6	3.6	17.5	26.0	11.1

WIND DIR	000	149	150	299	300	599	600	1000	2000	3500	4999	6500	8000+	NH <5/8	TOTAL
N	.6	.6	.0	.0	.3	.3	1.1	1.7	.6	.1	.1	.0	.0	1.3	60
NNE	.4	.4	.0	.0	.1	.1	.7	1.1	.1	.1	.1	.0	.0	.6	34
NE	.0	.0	.0	.0	.1	.1	.6	1.6	.5	.2	.2	.0	.0	1.0	43
ENE	.1	.1	.0	.0	.3	.3	.8	.6	.6	.0	.0	.0	.1	.9	36
E	.3	.3	.0	.0	.0	.0	.9	1.4	.4	.0	.0	.0	.0	.9	42
ESE	.3	.3	.0	.0	.3	.3	.3	.6	.2	.0	.0	.0	.0	.4	22
SE	.6	.6	.0	.0	.3	.3	.5	.9	.3	.1	.1	.0	.0	.7	37
SSE	1.1	1.1	.1	.1	.4	.4	1.0	.9	.5	.0	.0	.0	.0	1.5	59
S	1.2	1.2	.1	.1	.2	.2	1.8	1.6	.4	.0	.0	.0	.0	1.6	73
SSW	.8	.8	.0	.0	.2	.2	.6	1.5	1.0	.1	.1	.0	.0	1.9	66
SW	.5	.5	.1	.1	.2	.2	1.5	1.8	.4	.1	.1	.0	.0	1.7	67
WSW	.5	.5	.0	.0	.3	.3	1.0	2.0	1.2	.1	.1	.0	.0	4.2	100
W	.2	.2	.1	.1	.8	.8	2.8	4.0	2.0	.4	.4	.1	.0	6.7	186
WNW	.3	.3	.2	.2	.1	.1	.7	2.6	1.5	.1	.1	.0	.0	2.9	91
NW	.2	.2	.2	.2	.0	.0	1.9	2.2	1.0	.2	.2	.1	.0	3.0	94
NNW	.3	.3	.2	.2	.2	.2	1.0	1.6	.6	.1	.1	.0	.0	1.7	63
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.5	7
TOT OBS	77	77	10	10	39	39	189	281	120	15	15	5	3	339	1080
TOT PCT	7.1	7.1	.9	.9	3.6	3.6	17.5	26.0	11.1	1.4	1.4	.5	.3	31.4	100.0



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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)									
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0		
= OR >6500	.3	.5	.5	.5	.5	.5	.5	.5		
= OR >5000	.6	.9	.9	.9	.9	.9	.9	.9		
= OR >3500	1.3	2.2	2.2	2.2	2.3	2.3	2.3	2.3		
= OR >2000	7.0	12.6	13.3	13.3	13.4	13.5	13.5	13.5		
= OR >1000	16.4	34.7	38.6	39.3	39.7	39.8	39.8	39.8		
= OR >600	24.5	47.9	54.6	56.0	56.8	56.9	56.9	56.9		
= OR >300	25.0	50.3	57.9	59.5	60.4	60.5	60.5	60.5		
= OR >150	25.2	50.9	58.8	60.4	61.4	61.4	61.4	61.4		
= OR > 0	25.3	52.5	62.7	65.6	67.4	68.2	68.5	68.5		
TOTAL	273	566	677	708	727	736	739	739		

TOTAL NUMBER OF OBS: 1079

PCT FREQ NH <5/8: 31.5

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

										TOTAL
										OBS
0	1	2	3	4	5	6	7	8		
2.6	3.9	7.5	8.5	8.8	10.1	11.7	12.4	27.8	6.8	1123

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.1	.0	.1	.0	.0	.1	.0	.1	.1	.0	.0	.1	.0	.0	.0	.0	.0	8	.6
NO PCP	.0	.0	.0	.1	.1	.1	.1	.0	.1	.1	.1	.0	.0	.0	.1	.0	.0	10	.7
TOTAL	1	0	1	2	1	4	1	1	3	1	1	1	0	0	1	0	0	18	1.3
PCP	.3	.0	.1	.0	.0	.2	.1	.1	.1	.1	.1	.1	.0	.0	.1	.0	.0	19	1.4
NO PCP	.0	.0	.0	.0	.1	.1	.1	.2	.1	.1	.4	.1	.0	.0	.1	.0	.0	15	1.4
TOTAL	4	0	1	0	2	4	4	5	3	2	7	4	0	0	2	0	0	38	2.7
PCP	.3	.0	.3	.1	.2	.1	.2	.4	.1	.1	.1	.1	.0	.0	.1	.0	.0	31	2.2
NO PCP	.1	.0	.0	.0	.1	.1	.2	.1	.1	.1	.3	.1	.1	.1	.0	.0	.0	19	1.4
TOTAL	5	0	4	2	4	4	6	7	2	3	6	2	2	1	1	0	0	50	3.6
PCP	.2	.3	.8	.3	.3	.7	.4	.7	.4	.6	.4	.4	.4	.2	.1	.0	.0	90	6.4
NO PCP	.4	.4	.3	.1	.1	.3	.1	.5	.7	.6	.6	1.0	.5	.5	.4	.0	.0	98	7.0
TOTAL	9	9	15	7	6	14	8	17	15	17	14	19	12	10	8	0	0	188	13.4
PCP	.9	.4	.5	.2	.3	.3	.4	.6	.4	.7	.6	1.0	.4	.7	.6	.0	.1	116	8.3
NO PCP	1.9	.6	.9	1.6	.5	1.3	1.5	2.0	2.1	1.9	2.5	5.8	2.6	2.6	1.2	.0	.0	416	29.6
TOTAL	39	14	20	25	11	22	26	37	34	36	44	95	43	46	25	0	1	532	37.9
PCP	.4	.1	.1	.1	.1	.2	.1	.1	.1	.1	.1	.6	.2	.1	.3	.0	.0	44	3.1
NO PCP	2.0	1.1	1.7	1.4	.6	1.2	1.5	2.7	1.7	2.6	3.6	6.6	2.9	4.0	2.6	.0	.5	535	38.1
TOTAL	34	16	26	22	9	20	23	40	26	38	53	101	44	58	41	0	7	579	41.2
TOTAL PCT	92	39	67	58	33	68	68	107	83	97	125	222	101	115	78	0	8	1405	100.0
	6.5	2.8	4.8	4.1	2.3	4.8	4.8	7.6	5.9	6.9	8.9	15.8	7.2	8.2	5.6	.0	.6	100.0	

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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1	.1
	4-10	.0	.0	.0	.0	.1	.1	.1	.0	.2	.0	.0	.0	.0	.0	.0	.1	.0	.0	7	.4
	11-21	.1	.0	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4	.2
	22+	.0	.0	.1	.0	.1	.0	.1	.1	.0	.2	.1	.1	.1	.0	.0	.0	.0	.0	10	.5
	TOTAL	1	0	1	1	2	1	4	2	3	3	1	1	1	0	0	1	0	0	22	1.2
1/2<1	0-3	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1	.1
	4-10	.0	.0	.0	.0	.0	.1	.1	.1	.1	.0	.0	.1	.0	.1	.0	.0	.0	.0	7	.4
	11-21	.1	.0	.1	.0	.0	.0	.0	.0	.2	.0	.1	.1	.1	.1	.1	.1	.0	.0	13	.7
	22+	.2	.0	.0	.0	.0	.1	.1	.2	.1	.2	.1	.3	.2	.0	.0	.0	.0	.0	24	1.3
	TOTAL	4	1	2	0	0	3	4	4	6	3	2	7	4	2	1	2	0	0	45	2.4
1<2	0-3	.0	.0	.1	.0	.0	.0	.0	.0	.1	.0	.0	.0	.1	.0	.0	.0	.0	.0	4	.2
	4-10	.1	.0	.1	.1	.0	.0	.0	.1	.1	.1	.1	.1	.0	.0	.1	.0	.0	.0	11	.6
	11-21	.1	.0	.1	.1	.0	.1	.1	.1	.1	.1	.1	.2	.0	.1	.1	.1	.0	.0	18	1.0
	22+	.1	.0	.2	.0	.1	.2	.2	.4	.2	.0	.1	.2	.1	.1	.1	.1	.0	.0	36	2.0
	TOTAL	5	0	6	3	2	4	4	11	8	2	3	9	3	3	4	2	0	0	69	3.7
2<5	0-3	.0	.0	.0	.0	.1	.0	.1	.0	.0	.0	.2	.1	.0	.1	.1	.0	.0	.1	10	.5
	4-10	.2	.1	.1	.1	.1	.1	.1	.2	.2	.1	.5	.1	.3	.1	.1	.1	.0	.0	42	2.3
	11-21	.1	.3	.1	.0	.3	.2	.4	.1	.6	.2	.2	.1	.4	.3	.3	.2	.0	.0	68	3.7
	22+	.5	.3	.7	.4	.1	.2	.5	.3	.5	.7	.8	.7	.7	.4	.4	.3	.0	.0	137	7.4
	TOTAL	15	11	16	5	10	7	19	12	24	17	29	17	26	16	16	11	0	2	257	13.9
5<10	0-3	.0	.1	.2	.1	.1	.1	.1	.0	.1	.0	.3	.1	.2	.1	.1	.0	.0	.2	26	1.4
	4-10	.3	.3	.3	.5	.2	.2	.5	.4	.4	.5	.5	.2	.8	.4	.7	.2	.0	.0	115	6.2
	11-21	1.2	.2	.5	.5	1.1	.3	.8	.5	1.0	.8	1.0	.7	1.6	1.0	1.2	.3	.0	.0	236	12.8
	22+	1.1	.4	.3	.3	.3	.2	.5	.8	1.3	.9	1.7	1.7	3.3	1.4	1.8	1.1	.0	.0	299	16.2
	TOTAL	48	19	25	19	31	13	36	32	51	40	49	49	107	53	71	30	0	3	676	36.7
10+	0-3	.1	.1	.1	.0	.1	.1	.1	.1	.2	.1	.2	.0	.3	.1	.2	.0	.0	.4	34	1.8
	4-10	.7	.1	.5	.2	.5	.2	.3	.5	.8	.5	1.0	.8	1.3	.8	1.2	.6	.0	.0	186	10.1
	11-21	1.1	.6	.5	.5	.5	.3	.8	1.0	1.2	1.1	1.4	1.8	2.3	1.4	1.5	1.1	.0	.0	316	17.1
	22+	.5	.2	.5	.6	.2	.2	.1	.1	.5	.3	1.4	1.2	2.8	1.5	2.0	.9	.0	.0	238	12.9
	TOTAL	45	18	31	25	24	13	24	30	50	37	71	70	123	68	89	48	0	8	774	42.0
	TOTAL	118	49	81	57	69	41	91	91	142	102	155	153	264	142	181	94	0	13	1843	100.0
	PCT	6.4	2.7	4.4	3.1	3.7	2.2	4.9	4.9	7.7	5.5	8.4	8.3	14.3	7.7	9.8	5.1	.0	.7	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8), AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	4.8	1.0	4.2	18.3	28.0	8.7	2.3	.3	.6	.3	68.5	31.5	311
06009	7.1	1.1	3.0	16.0	27.2	10.8	1.1	.0	.0	.0	66.4	33.6	268
12015	10.4	.8	3.8	14.6	23.8	13.8	.8	.8	.4	.0	69.2	30.8	260
18021	6.9	.8	3.1	19.6	23.8	11.2	1.2	.8	.0	.4	67.7	32.3	260
TOT	79	10	39	189	284	121	15	5	3	2	747	352	1009
PCT	7.2	.9	3.5	17.2	25.8	11.0	1.4	.5	.3	.2	68.0	32.0	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	1.0	.7	4.2	11.4	26.5	56.2	306
06009	.4	3.0	2.3	12.1	37.7	44.5	265
12015	2.0	2.7	2.4	15.3	32.2	45.5	255
18021	1.2	1.2	3.6	8.3	37.9	47.8	253
TOT	12	20	34	127	359	527	1079
PCT	1.1	1.9	3.2	11.8	33.3	48.8	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET, NH >4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00003	4.6	10.1	35.3	35.6	29.1	306
06009	7.5	12.8	35.8	33.2	30.9	265
12015	10.6	16.9	37.6	34.5	27.8	255
18021	6.3	11.1	34.0	35.2	30.8	253
TOT	77	136	385	374	320	1079
PCT	7.1	12.6	35.7	34.7	29.7	100.0

NOVEMBER

PERIOD: (PRIMARY) 1942-1969  
(OVER-ALL) 1901-1969

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 13

TEMP F	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP										
	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100			
50/54	.1	.0	.1	.0	.7	.2	.4	.3			
45/49	.0	.0	.0	.2	1.0	3.2	4.7	4.7			
40/44	.0	.0	.1	.7	5.8	11.9	15.3	17.6			
35/39	.0	.0	.2	.8	3.5	5.2	8.2	11.3			
30/34	.0	.0	.0	.0	.4	.2	.8	2.1			
25/29	.0	.0	.0	.0	.0	.1	.0	.2			
TOTAL	1	0	4	21	143	259	366	449			
PCT	.1	.0	.3	1.7	11.5	20.8	29.4	36.1			

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP											VAR	CALM
TEMP F	N	NE	E	SE	S	SW	W	NW	VAR	CALM		
50/54	.2	.0	.0	.2	.5	.6	.2	.2	.0	.1		
45/49	.5	.6	1.3	2.0	3.9	2.8	2.1	.6	.0	.0		
40/44	3.8	4.0	3.2	6.8	7.1	8.4	11.3	6.4	.0	.5		
35/39	3.5	2.8	1.9	1.0	1.9	4.4	7.2	6.2	.0	.2		
30/34	1.4	.3	.2	.1	.2	.0	.3	.9	.0	.1		
25/29	.2	.0	.0	.0	.0	.0	.1	.0	.0	.0		
TOTAL	119	96	81	125	168	201	264	178	0	11		
PCT	9.6	7.7	6.5	10.1	13.5	16.2	21.2	14.3	.0	.9		

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR										
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS	
00003	54	50	48	41	35	31	29	41.4	543	
06009	53	49	46	41	34	32	29	40.6	476	
12015	52	48	45	41	34	32	30	40.3	388	
18021	53	51	46	41	35	32	30	40.5	465	
TOT	54	50	46	41	34	32	29	40.8	1872	

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR								TOTAL
HOUR (GMT)	0-29	30-59	60-69	70-79	80-89	90-100	MEAN	OBS
00003	.0	2.7	13.1	22.3	29.5	32.4	82	373
06009	.0	2.8	14.6	21.1	25.7	35.9	83	323
12015	.4	1.7	8.9	20.8	34.3	33.9	83	236
18021	.0	.6	8.8	18.9	29.9	41.8	85	318
TOT	1	25	145	260	369	450	83	1250

PERIOD: (PRIMARY) 1942-1969 (OVER-ALL) 1901-1969		NOVEMBER										AREA 0008 DUTCH HARBOR 51-55N 165-172W						
		TABLE 17																
		PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION) VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)																
AIR-SEA TMP DIF		29	32	33	36	37	40	41	44	45	48	49	52	53	56	TOT	W	MO FOG
9/10		.0	.0	.0	.0	.0	.0	.0	.0	.1	.3	.0	.0	.0	.0	1	.0	.1
7/8		.0	.0	.0	.0	.0	.0	.2	.4	.3	.3	.2	.1	.1	.0	11	.0	.9
5		.0	.0	.0	.0	.2	.5	.4	.5	1.3	.3	.0	.0	.0	.0	14	.0	1.1
4		.0	.0	.0	.0	.5	.8	.5	.8	1.3	.3	.0	.0	.0	.0	30	.0	2.3
3		.0	.0	.0	.0	.2	.8	.2	.8	2.7	.7	.2	.0	.0	.0	29	.2	2.0
2		.0	.0	.0	.0	.5	.5	2.1	2.7	3.1	.7	.2	.0	.0	.0	71	.5	4.9
1		.0	.0	.0	.0	.8	.8	3.1	3.3	3.3	.3	.1	.0	.0	.0	82	.3	6.0
0		.0	.0	.1	.1	1.8	1.8	8.3	8.3	3.3	.7	.0	.0	.0	.0	175	.6	12.9
-1		.0	.0	.2	.2	2.2	2.2	5.7	5.7	.8	.8	.1	.0	.0	.0	113	.3	8.4
-2		.0	.0	.5	.5	3.6	3.6	6.7	6.7	.5	.5	.0	.0	.0	.0	152	.2	11.6
-3		.0	.0	.0	.0	5.2	5.2	3.4	3.4	.2	.2	.0	.0	.0	.0	117	.1	9.0
-4		.0	.0	.5	.5	5.8	5.8	3.0	3.0	.0	.0	.0	.0	.0	.0	123	.1	9.4
-5		.0	.0	2.1	2.1	5.9	5.9	1.8	1.8	.0	.0	.0	.0	.0	.0	126	.0	9.7
-6		.1	.1	1.6	1.6	2.9	2.9	.5	.5	.0	.0	.0	.0	.0	.0	65	.1	4.9
-7/-8		.4	.4	2.5	2.5	3.8	3.8	1.1	1.1	.0	.0	.0	.0	.0	.0	100	.0	7.7
-9/-10		.3	.3	2.3	2.3	1.3	1.3	.2	.2	.0	.0	.0	.0	.0	.0	53	.1	4.0
-11/-13		.3	.3	.9	.9	.4	.4	.0	.0	.0	.0	.0	.0	.0	.0	20	.0	1.5
-14/-16		.4	.4	.4	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	10	.0	.8
-17/-19		.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1	.0	.1
TOTAL		20	143	451	488	180	13.9	.8	.1	.1	.1	.1	.1	.1	.1	1293	32	1261
PCT		1.5	11.1	34.9	37.7	13.9	.8	.1	.1	.1	.1	.1	.1	.1	.1	100.0	2.5	97.5

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N					NE					TOTAL		
	1-3	4-10	11-21	22-33	34-47	48+	1-3	4-10	11-21	22-33		34-47	48+
<1	.0	.2	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0
1-2	.0	.8	1.4	.0	.0	.0	.0	1.2	.0	.0	.0	.0	.0
3-4	.0	.4	.8	.6	.0	.0	.0	.6	.8	1.0	.0	.0	.0
5-6	.0	.0	1.4	.2	.4	.0	.0	.2	.6	.4	.0	.0	.0
7	.0	.0	.8	.8	.2	.0	.0	.2	.2	1.0	.2	.0	.0
8-9	.0	.0	.2	.4	.2	.0	.0	.0	.4	.6	.2	.0	.0
10-11	.0	.2	.0	.4	.0	.0	.0	.0	.0	.6	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.2	.0	.0
13-16	.0	.0	.0	.2	.0	.0	.0	.0	.0	.2	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOTAL	.0	8	23	13	4	.0	.0	13	10	21	3	.0	47
PCT	.0	1.6	4.5	2.5	.8	.0	.0	2.5	1.9	4.1	.6	.0	9.1

HGT	E					SE					TOTAL		
	1-3	4-10	11-21	22-33	34-47	48+	1-3	4-10	11-21	22-33		34-47	48+
<1	.2	.2	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	1
1-2	.0	1.2	.0	.0	.0	.0	.0	1.0	.6	.0	.0	.0	8
3-4	.0	.2	.6	.2	.0	.0	.0	.2	1.6	.6	.0	.0	12
5-6	.0	.0	1.4	.4	.0	.0	.0	.2	2.3	.2	.0	.0	14
7	.0	.0	.4	.2	.0	.0	.0	.0	.6	.4	.2	.0	6
8-9	.0	.0	.6	.2	.2	.0	.0	.0	.0	.4	.0	.0	2
10-11	.0	.0	.2	.4	.0	.0	.0	.0	.0	.4	.0	.0	2
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	2
13-16	.0	.0	.0	.4	.2	.0	.0	.0	.0	.6	.0	.0	3
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	1	8	17	9	2	0	37	8	26	13	3	0	50
PCT	.2	1.6	3.3	1.7	.4	.0	7.2	1.6	5.0	2.5	.6	.0	9.7

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S					SW					TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47								
<1	.2	.0	.0	.0	.0	.0	.4	.0	.0	.0	1	.0	.0	.0	.0	.0	.0	2
1-2	.0	1.4	1.4	.0	.0	.0	1.0	.6	.0	.0	14	.0	.0	.0	.0	.0	.0	8
3-4	.0	.4	1.6	.4	.0	.0	.0	1.6	.6	.0	12	.0	.0	.0	.0	.0	.0	13
5-6	.0	.2	.8	1.2	.0	.0	.0	1.4	1.9	.0	11	.0	.0	.0	.0	.0	.0	17
7	.0	.0	.6	1.0	.0	.0	.0	.8	1.2	.4	8	.0	.0	.0	.0	.0	.0	12
8-9	.0	.0	.6	.2	.4	.0	.0	.4	1.4	.2	6	.0	.0	.0	.0	.0	.0	12
10-11	.0	.0	.0	.0	.4	.0	.0	.0	.8	.2	2	.0	.0	.0	.0	.0	.0	7
12	.0	.0	.0	.2	.0	.0	.0	.0	.0	.4	1	.0	.0	.0	.0	.0	.0	3
13-16	.0	.0	.0	.2	.6	.0	.0	.2	.2	.8	4	.0	.0	.0	.0	.0	.0	6
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	0	.0	.0	.0	.0	.0	.0	2
20-22	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	2	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	0	.0	.0	.0	.0	.0	.0	1
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	4
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	1	10	25	16	9	61	9	29	34	12	87	0	9	29	34	12	3	87
PCT	.2	1.9	4.9	3.1	1.7	11.8	1.7	5.6	6.6	2.3	16.9	.0	1.7	5.6	6.6	2.3	.6	16.9

HGT	W					NW					TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	GRAND TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47									
<1	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	3	.0	.0	.0	.0	.0	.0	0	12
1-2	.0	1.7	.6	.0	.0	.0	1.2	.8	.0	.0	12	.0	.0	.0	.0	.0	.0	0	75
3-4	.0	1.0	2.5	.2	.3	.0	.4	1.6	.0	.0	19	.0	.0	.0	.0	.0	.0	0	10
5-6	.0	.2	2.3	2.3	.0	.0	.8	2.3	.6	.2	25	.0	.0	.0	.0	.0	.0	0	92
7	.0	.0	1.7	1.7	.0	.0	.0	.8	.8	.0	18	.0	.0	.0	.0	.0	.0	0	112
8-9	.0	.0	.8	1.2	.4	.0	.0	.4	.4	.0	12	.0	.0	.0	.0	.0	.0	0	72
10-11	.0	.0	.6	.6	.2	.0	.0	.2	.6	.2	7	.0	.0	.0	.0	.0	.0	0	51
12	.0	.0	.0	.6	.4	.0	.0	.2	.0	.0	5	.0	.0	.0	.0	.0	.0	0	32
13-16	.0	.0	.2	1.7	.8	.0	.0	.0	.0	.4	15	.0	.0	.0	.0	.0	.0	0	16
17-19	.0	.0	.0	.4	.2	.0	.0	.0	.2	.0	3	.0	.0	.0	.0	.0	.0	0	34
20-22	.0	.0	.0	.2	.4	.0	.0	.0	.2	.0	2	.0	.0	.0	.0	.0	.0	0	6
23-25	.0	.0	.0	.2	.2	.0	.0	.0	.2	.0	2	.0	.0	.0	.0	.0	.0	0	5
26-32	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	1	.0	.0	.0	.0	.0	.0	0	3
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	5
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
TOTAL	0	18	45	47	13	124	12	32	13	4	124	0	12	32	13	4	0	61	515
PCT	.0	3.5	8.7	9.1	2.5	24.1	2.3	6.2	2.5	.8	24.1	.0	2.3	6.2	2.5	.8	.0	11.8	100.0



PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1969

NOVEMBER

AREA 0008 DUTCH HARBDR  
51-55N 165-172W

TABLE 18 (CONT)

		WIND SPEED (KTS) VS SEA HEIGHT (FT)								TOTAL OBS
HGT		0-3	4-10	11-21	22-33	34-47	48+			
<1		.6	1.9	.0	.0	.0	.0			13
1-2		.0	9.3	5.2	.0	.0	.0			75
3-4		.0	3.5	10.9	3.5	.0	.0			92
5-6		.0	1.6	12.4	7.2	.6	.0			112
7		.0	.2	5.8	7.0	1.0	.0			72
8-9		.0	.0	3.7	4.7	1.6	.0			51
10-11		.0	.2	1.4	3.7	1.0	.0			32
12		.0	.0	.4	1.2	1.4	.2			16
13-16		.0	.0	.4	3.5	2.5	.2			34
17-19		.0	.0	.0	.8	.4	.0			6
20-22		.0	.0	.0	.2	.8	.0			5
23-25		.0	.0	.0	.2	.4	.0			3
26-32		.0	.0	.0	.4	.2	.4			5
33-40		.0	.0	.0	.0	.0	.0			0
41-48		.0	.0	.0	.0	.0	.0			0
49-60		.0	.0	.0	.0	.0	.0			0
61-70		.0	.0	.0	.0	.0	.0			0
71-86		.0	.0	.0	.0	.0	.0			0
87+		.0	.0	.0	.0	.0	.0			0
TOTAL		3	86	207	166	50	4			516
PCT		.6	16.7	40.1	32.2	9.7	.8			100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.5	6.8	6.3	4.0	2.3	2.4	.3	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	131	4
6-7	.0	.9	4.0	8.3	5.0	3.7	2.6	1.4	1.7	.3	.2	.2	.0	.0	.0	.0	.0	.0	.0	163	7
8-9	.0	.5	.2	3.7	6.6	3.8	2.3	1.2	3.0	.7	.7	.3	.7	.0	.0	.0	.0	.0	.0	136	9
10-11	.0	.3	.2	.3	1.4	2.4	2.3	.9	1.6	.5	.5	.2	.9	.0	.0	.0	.0	.0	.0	66	11
12-13	.0	.0	.2	.2	.2	.9	1.2	.9	.5	.3	.0	.3	.5	.0	.0	.0	.0	.0	.0	30	12
>13	.0	.0	.0	.0	.0	.0	.5	.7	2.1	.2	.5	.0	.5	.0	.0	.0	.0	.0	.0	26	15
INDET	3.3	.2	.0	.0	.2	.2	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	23	1
TOTAL	22	50	62	95	90	77	53	30	32	12	11	6	15	0	0	0	0	0	0	575	7
PCT	3.8	8.7	10.8	16.5	15.7	13.4	9.2	5.2	9.0	2.1	1.9	1.0	2.6	.0	.0	.0	.0	.0	.0	100.0	

DECEMBER

PERIOD: (PRIMARY) 1944-1969  
(OVER-ALL) 1900-1969

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE				HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW	OTHER FRZN PCPN	FOG PCPN					SMOKE HAZE	DUST BLWG	NO SIG WEA			
N	.3	.3	.3	.1	1.0	.1	.0	1.9	33	.0	.0	.0	.0	7.3	161		
NNE	.3	.1	.0	.0	.5	.0	.0	.8	14	.0	.0	.0	.0	3.2	71		
NE	.5	.0	.5	.0	1.2	.0	.0	2.1	37	.0	.1	.0	.0	4.3	113		
ENE	.6	.1	.5	.0	.9	.0	.1	1.8	31	.0	.1	.0	.0	3.8	100		
E	1.0	.0	.7	.0	.5	.0	.0	2.2	38	.0	.2	.0	.0	4.6	122		
ESE	1.7	.0	.4	.0	.3	.0	.0	2.2	38	.0	.2	.0	.0	3.6	105		
SE	.9	.1	.5	.0	.5	.0	.0	2.0	35	.0	.2	.0	.0	4.0	110		
SSE	.7	.1	.5	.0	.1	.0	.0	1.4	24	.0	.2	.1	.0	3.5	90		
S	1.0	.1	.2	.0	.5	.0	.0	1.7	30	.0	.2	.1	.0	5.1	126		
SSW	.4	.2	.1	.0	.2	.0	.0	.7	13	.0	.0	.0	.0	3.5	74		
SW	.2	.1	.2	.0	.2	.0	.1	.6	11	.0	.1	.0	.0	3.8	79		
WSW	.3	.1	.2	.0	.3	.0	.0	.8	14	.0	.0	.0	.0	4.0	84		
W	.3	.3	.0	.0	.8	.0	.2	1.4	25	.0	.1	.0	.0	7.4	157		
WNW	.3	.1	.1	.0	.6	.0	.1	1.0	18	.0	.0	.0	.1	5.3	112		
NW	.2	.1	.1	.0	1.4	.0	.1	1.9	33	.0	.1	.0	.0	5.4	129		
NNW	.2	.1	.2	.0	.9	.0	.1	1.4	25	.0	.0	.0	.0	4.8	110		
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0		
CALM	.0	.0	.2	.0	.0	.0	.0	.2	4	.0	.0	.0	.0	.5	13		
TOT OBS	157	30	81	1	174	2	12		423	0	27	4	1	1301	1756		
TOT PCT	8.9	1.7	4.6	.1	9.9	.1	.7	24.1		.0	1.5	.2	.1	74.1	100.0		

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE				HAIL	PCT FREQ PCPN AT 08 TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA						TOTAL OBS
				FRZG PCPN	SNOW	OTHER FRZN PCPN	FOG WO PCPN					SMOKE HAZE	DUST BLWG	NO SIG WEA				
00003	8.5	1.6	4.6	.2	10.7	.0	1.4	25.8	130	.0	2.4	.2	.0	71.6	503			
06009	9.6	2.4	4.5	.0	9.6	.2	.0	23.2	97	.0	.7	.2	.0	75.8	418			
12015	7.5	1.7	4.6	.0	8.9	.2	.5	21.2	88	.0	1.7	.2	.2	76.6	415			
18021	9.8	1.1	4.6	.0	10.3	.0	.7	25.1	110	.0	1.1	.2	.0	73.5	438			
TOT	157	30	81	1	176	2	12		425	0	27	4	1	1317	1774			
PCT	8.9	1.7	4.6	.1	9.9	.1	.7	24.0		.0	1.5	.2	.1	74.2	100.0			

DECEMBER

PERIOD: (PRIMARY) 1944-1969  
(OVER-ALL) 1900-1969

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						21
	0-3	4-10	11-21	22-33	34-47	48+	48+	48+	48+	48+				00	03	06	09	12	15	18
N	*	2.0	3.8	2.0	.9	*	186	8.8	16.9	8.4	5.3	9.6	6.8	9.0	10.0	9.1	7.9	9.1	7.9	7.9
NNE	*	1.0	1.8	.7	.1	.1	82	3.9	17.5	3.9	1.3	4.6	2.7	4.2	3.0	3.9	2.6	3.9	2.6	2.6
NE	.4	1.7	3.1	1.7	.1	.0	146	6.9	16.5	6.0	7.9	8.1	8.2	6.7	3.0	8.2	1.3	8.2	1.3	1.3
ENE	.1	1.3	2.6	1.0	.3	.1	114	5.4	17.3	4.3	5.3	3.5	6.8	7.6	6.0	5.4	11.8	5.4	11.8	11.8
E	*	1.5	2.6	2.0	.7	.1	148	7.0	19.7	8.0	6.6	6.1	8.2	5.3	9.0	6.7	11.8	6.7	11.8	11.8
ESE	.0	.8	2.3	1.4	.9	.1	114	5.4	22.2	4.7	13.2	4.8	9.6	4.8	4.0	5.4	6.6	5.4	6.6	6.6
SE	.1	1.5	2.6	1.5	.3	.1	128	6.1	17.9	6.0	5.3	7.4	5.5	5.1	10.0	4.7	6.6	4.7	6.6	6.6
SSE	.1	1.3	1.9	1.2	.4	*	107	5.1	18.3	4.3	9.2	3.3	8.2	5.3	7.0	5.0	10.5	5.0	10.5	10.5
S	.4	1.6	3.3	1.4	.5	*	153	7.2	17.3	8.0	7.9	7.4	9.6	5.9	5.0	6.7	10.5	6.7	10.5	10.5
SSW	*	.9	2.0	1.0	.4	.0	94	4.4	18.8	5.5	2.6	4.8	4.1	4.8	6.0	3.2	1.3	3.2	1.3	1.3
SW	.3	1.6	1.8	1.1	.3	.2	112	5.3	17.6	5.3	5.3	5.5	2.7	3.9	4.0	7.5	1.3	7.5	1.3	1.3
WSW	.0	.9	2.0	1.6	.1	*	99	4.7	19.6	3.5	6.6	4.8	4.1	4.5	5.0	5.8	3.9	5.8	3.9	3.9
W	.6	2.2	3.9	1.7	.9	*	198	9.4	17.8	9.9	6.6	10.1	5.5	10.4	7.0	9.1	7.9	9.1	7.9	7.9
WNW	.1	1.0	2.6	1.7	.6	.1	130	6.1	20.3	8.0	5.3	6.3	6.9	6.2	5.0	4.3	5.3	4.3	5.3	5.3
NW	.7	1.5	3.8	1.2	.3	.0	157	7.4	15.5	8.0	9.2	7.4	1.4	7.9	6.0	7.8	5.3	7.8	5.3	5.3
NNW	.1	1.3	2.2	1.8	.5	.1	126	6.0	19.3	5.1	2.6	5.5	9.6	7.3	9.0	6.0	3.9	6.0	3.9	3.9
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.0	463	894	487	157	24	2115	1.0	18.2	1.2	.0	.7	.0	1.1	4.0	1.3	1.3	1.3	1.3	1.3
TOT OBS	90	21.9	42.3	23.0	7.4	1.1	2115	100.0	18.2	513	76	457	73	356	100	464	76	464	76	76
TOT PCT	4.3	21.9	42.3	23.0	7.4	1.1	2115	100.0	18.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						21
	0-6	7-16	17-27	28-40	41+	41+	41+	41+	41+	41+				00	03	06	09	12	15	18
N	1.1	4.9	4.8	1.7	.3	268	12.7	18.5	12.3	6.6	14.2	9.6	13.2	13.0	12.9	10.5	10.5	12.9	10.5	10.5
NE	1.4	5.3	4.2	1.1	.2	260	12.3	16.9	10.3	13.2	11.6	15.1	14.3	9.0	13.6	13.2	13.2	13.6	13.2	13.2
E	1.0	3.7	4.6	2.6	.5	262	12.4	20.8	12.7	19.7	10.9	17.8	10.1	13.0	12.1	18.4	18.4	12.1	18.4	18.4
SE	1.0	4.2	4.3	1.4	.3	235	11.1	18.1	10.3	14.5	10.7	13.7	10.4	17.0	9.7	17.1	17.1	9.7	17.1	17.1
S	1.3	4.6	3.5	1.9	.3	247	11.7	17.9	13.5	10.5	12.3	13.7	10.7	11.0	9.9	11.8	11.8	9.9	11.8	11.8
SW	1.2	3.5	3.5	1.4	.4	211	10.0	18.5	8.8	11.8	10.3	6.8	8.4	9.0	13.4	5.3	5.3	13.4	5.3	5.3
W	1.7	6.1	4.3	3.0	.5	328	15.5	18.8	17.9	11.8	16.4	12.3	16.6	12.0	13.4	13.2	13.2	12.0	13.4	13.2
NW	1.8	5.0	4.9	1.4	.3	283	13.4	17.2	13.1	11.8	12.9	11.0	15.2	15.0	13.8	9.2	9.2	15.0	13.8	9.2
VAR	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.0	789	719	306	58	21	1.0	.0	1.2	.0	.7	.0	1.1	1.0	1.3	1.3	1.3	1.0	1.3	1.3
TOT OBS	243	37.3	34.0	14.5	2.7	2115	100.0	18.2	513	76	457	73	356	100	464	76	464	76	464	76
TOT PCT	11.5	37.3	34.0	14.5	2.7	2115	100.0	18.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

DECEMBER

PERIOD: (PRIMARY) 1944-1969  
(OVER-ALL) 1900-1969

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	WIND SPEED (KNOTS)					PCT		TOTAL OBS
	1-3	4-10	11-21	22-33	34-47	48+	MEAN	
00003	3.6	20.5	42.1	24.1	7.8	.8	18.3	589
06009	3.2	22.1	40.4	23.8	7.9	2.1	18.7	530
12015	1.5	20.4	45.6	24.3	6.6	.4	18.3	456
18021	4.4	24.4	41.5	20.0	7.2	1.1	17.3	540
TOT	69	463	894	487	157	24	18.2	2115
PCT	3.3	21.9	42.3	23.0	7.4	1.1	18.2	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION					TOTAL OBS	MEAN CLOUD COVER
	0-2	3-4	5-7	8 & OBS	8 & OBS		
N	1.2	.7	3.9	4.4	139	6.3	
NNE	.4	.3	1.7	1.7	58	6.3	
NE	.5	.4	1.8	3.3	84	6.6	
ENE	.7	.4	1.5	3.1	78	6.3	
E	.4	.3	1.6	4.9	78	7.1	
ESE	.2	.2	1.3	4.4	84	7.4	
SE	.5	.4	1.1	3.9	82	4.8	
SSE	.4	.4	1.5	2.8	69	6.6	
S	.9	1.2	1.8	3.0	96	5.9	
SSW	1.1	.4	1.8	.9	58	5.0	
SW	.4	.9	1.1	1.5	53	5.7	
WSW	1.0	.9	1.1	1.7	65	5.2	
W	1.4	1.6	3.1	2.8	123	5.5	
WNW	.5	.9	2.5	2.6	90	6.1	
NW	.7	1.3	3.2	2.0	100	5.7	
NNW	1.1	.7	2.8	1.7	87	5.6	
VAR	.0	.0	.0	.0	0	.0	
CALM	.1	.1	.4	.1	11	5.3	
TOT OBS	158	155	446	616	1375	6.1	
TOT PCT	11.5	11.3	32.4	44.8	100.0		

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	PERCENT OF TIME OCCURRENCE OF NH <5/8 BY WIND DIRECTION												TOTAL OBS					
	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	CLOUD COVER	000 149	150 299	300 599	600 999	1000 1999	2000 3499		3500 4999	5000 6499	6500 7999	8000+	ANY HGT
N	1.2	.7	3.9	4.4	139	6.3	.4	.0	.2	1.3	4.4	.8	.1	.0	.0	.0	3.0	139
NNE	.4	.3	1.7	1.7	58	6.3	.4	.0	.0	.5	1.8	.5	.1	.0	.0	.0	.9	58
NE	.5	.4	1.8	3.3	84	6.6	.7	.0	.2	.7	2.8	.4	.1	.0	.1	.0	1.2	84
ENE	.7	.4	1.5	3.1	78	6.3	.7	.0	.2	.9	1.5	.6	.1	.0	.0	.0	1.7	78
E	.4	.3	1.6	4.9	98	7.4	.9	.1	.1	1.2	2.5	1.0	.3	.0	.0	.0	1.0	98
ESE	.2	.2	1.3	4.4	84	7.4	.4	.0	.1	1.2	2.1	1.2	.0	.0	.0	.1	1.0	84
SE	.5	.4	1.1	3.9	82	4.8	1.0	.0	.2	.7	1.7	.7	.0	.0	.0	.0	1.5	82
SSE	.4	.4	1.5	2.8	69	6.6	.2	.0	.2	.9	1.9	.4	.1	.0	.0	.0	1.4	69
S	.9	1.2	1.8	3.0	96	5.9	.6	.0	.3	.4	1.7	.3	.3	.1	.0	.0	3.3	96
SSW	1.1	.4	1.8	.9	58	5.0	.1	.0	.1	.5	1.1	.2	.0	.1	.0	.0	2.1	58
SW	.4	.9	1.1	1.5	53	5.7	.1	.0	.2	.5	1.2	.2	.1	.0	.0	.1	1.4	53
WSW	1.0	.9	1.1	1.7	65	5.2	.4	.0	.3	.7	.8	.2	.0	.0	.0	.0	2.3	65
W	1.4	1.6	3.1	2.8	123	5.5	.6	.1	.5	1.1	1.9	.8	.1	.0	.1	.0	3.8	123
WNW	.5	.9	2.5	2.6	90	6.1	.4	.1	.1	1.5	1.7	.9	.0	.0	.0	.1	1.7	90
NW	.7	1.3	3.2	2.0	100	5.7	.7	.0	.1	.8	1.9	.7	.1	.1	.0	.0	2.9	100
NNW	1.1	.7	2.8	1.7	87	5.6	.3	.0	.0	1.0	1.7	.9	.1	.0	.0	.0	2.2	87
VAR	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.1	.1	.4	.1	11	5.3	.0	.0	.0	.1	.1	.1	.0	.0	.0	.0	.4	11
TOT OBS	158	155	446	616	1375	6.1	104	6	42	193	425	138	18	4	3	4	438	1375
TOT PCT	11.5	11.3	32.4	44.8	100.0		7.6	.4	3.1	14.0	30.9	10.0	1.3	.3	.2	.3	31.9	100.0

DECEMBER

PERIOD: (PRIMARY) 1944-1969  
(OVER-ALL) 1900-1969

AREA 0006 DUTCH HAR80R  
51-55N 165-172W

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)									
	OR >10	OR >5	OR >2	OR >1	OR >1/2	OR >1/4	OR >50YD	OR >0		
OR >6500	.1	.4	.4	.5	.5	.5	.5	.5		
OR >5000	.4	.7	.7	.8	.8	.8	.8	.8		
OR >3500	1.6	2.0	2.1	2.2	2.2	2.2	2.2	2.2		
OR >2000	8.2	11.0	12.0	12.2	12.3	12.3	12.3	12.3		
OR >1000	22.4	35.6	41.5	42.5	42.9	43.2	43.3	43.3		
OR >600	26.7	43.9	53.0	56.0	56.7	57.1	57.3	57.3		
OR >300	27.4	45.4	55.2	58.8	59.7	60.1	60.2	60.2		
OR >150	27.4	45.4	55.6	59.2	60.1	60.5	60.7	60.7		
OR > 0	28.2	48.1	59.9	64.7	66.3	67.3	68.1	68.1		
TOTAL	389	663	825	892	914	928	938	939		

TOTAL NUMBER OF OBS: 1378

PCT FREQ NH <5/8: 31.9

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

										TOTAL OBS
0	1	2	3	4	5	6	7	8	OBSCD	
3.3	4.9	7.9	7.4	8.0	7.2	10.6	12.7	30.7	7.3	1421

DECEMBER

PERIOD: (PRIMARY) 1944-1969  
(OVER-ALL) 1900-1969

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.1	.1	.4	.1	.2	.1	.2	.0	.2	.1	.0	.0	.2	.1	.1	.1	.0	.0	33	1.9
NO PCP	.0	.0	.0	.1	.2	.1	.1	.0	.2	.1	.1	.1	.0	.1	.0	.0	.0	.0	17	1.0
TOTAL	1	1	7	4	7	3	4	0	8	2	1	2	3	3	2	2	0	0	50	2.9
PCP	.1	.0	.1	.2	.2	.3	.3	.1	.2	.2	.1	.1	.1	.1	.0	.0	.0	.0	35	2.0
NO PCP	.0	.0	.1	.0	.1	.0	.2	.1	.1	.2	.0	.0	.1	.0	.1	.1	.0	.0	14	.8
TOTAL	2	0	3	3	5	5	9	2	6	6	1	1	3	1	1	1	0	0	49	2.8
PCP	.1	.1	.6	.4	.5	.4	.2	.2	.2	.1	.0	.2	.1	.1	.5	.1	.0	.1	67	3.8
NO PCP	.0	.1	.1	.1	.2	.3	.2	.2	.1	.0	.1	.3	.2	.2	.0	.1	.0	.0	39	2.2
TOTAL	2	3	13	9	12	13	8	8	5	1	2	8	4	4	8	4	0	2	106	6.0
PCP	.5	.0	.5	.6	.5	.6	.3	.1	.2	.2	.1	.2	.1	.3	.3	.2	.0	.1	86	4.9
NO PCP	.9	.2	.6	.7	.8	.5	.6	.3	.6	.4	.6	.3	1.1	.4	.3	.4	.0	.0	152	8.7
TOTAL	23	3	20	24	23	18	17	8	14	11	13	8	20	12	11	11	0	2	238	13.6
PCP	.8	.5	.3	.4	.6	.9	.7	.6	.5	.2	.3	.2	.7	.4	.7	.7	.0	.0	152	8.7
NO PCP	1.8	.7	1.4	.9	1.0	.9	1.1	1.1	1.4	1.5	1.5	1.5	2.1	2.2	1.9	1.5	.0	.1	396	22.6
TOTAL	45	22	29	23	28	31	33	30	33	31	32	29	48	46	46	40	0	2	548	31.3
PCP	.3	.2	.2	.1	.1	.1	.2	.3	.3	.0	.1	.2	.3	.1	.2	.2	.0	.0	51	2.9
NO PCP	4.6	2.3	2.2	2.1	2.6	2.0	2.0	2.1	3.0	1.3	1.6	1.8	4.2	2.5	3.3	2.7	.0	.4	711	40.6
TOTAL	87	43	41	37	46	36	38	41	59	23	30	36	79	46	61	52	0	7	762	43.5
TOTAL	160	72	113	100	121	106	109	89	125	74	79	84	157	112	129	110	0	13	1753	100.0
PCT	9.1	4.1	6.4	5.7	6.9	6.0	6.2	5.1	7.1	4.2	4.5	4.8	9.0	6.4	7.4	6.3	.0	.7	100.0	

DECEMBER

PERIOD: (PRIMARY) 1944-1969  
(OVER-ALL) 1900-1969

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	4-10	.0	.0	.1	.0	.1	.1	.1	.0	.0	.1	.0	.0	.1	.0	.0	.1	.0	.0	10	.5
	11-21	.0	.0	.1	.1	.1	.1	.1	.0	.2	.1	.1	.0	.0	.1	.1	.0	.0	.0	20	.9
	22+	.1	.1	.2	.1	.2	.0	.1	.0	.2	.0	.0	.1	.1	.1	.0	*	.0	.0	26	1.2
	TOTAL	1	2	10	4	7	3	4	0	8	3	1	2	3	3	2	3	0	0	56	2.7
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2	.1
	4-10	.0	.0	.0	.0	.0	.1	.1	.1	.2	.1	.1	.0	.1	.0	.0	.0	.0	.0	17	.8
	11-21	.0	.0	.0	.0	.1	.1	.2	.1	.2	.1	.0	.0	.1	.0	*	.0	.0	.0	20	.9
	22+	.1	.0	.1	.1	.1	.1	.1	.1	.1	.1	.0	.0	.1	.1	.0	*	.0	.0	23	1.1
	TOTAL	2	0	3	3	5	5	10	5	11	6	2	1	5	2	1	1	0	0	62	2.9
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	3	.1
	4-10	.1	.0	.1	.1	.2	.0	.1	.1	.1	.0	.1	.0	.1	.0	.1	.1	.0	.0	30	1.4
	11-21	.1	.1	.4	.2	.2	.1	.1	.1	.1	.0	.1	.0	.1	.0	.1	.1	.0	.0	35	1.7
	22+	.1	.1	.2	.1	.3	.5	.2	.2	.2	.0	.0	.3	.1	.2	.2	.0	.0	.0	62	2.9
	TOTAL	5	3	16	10	15	13	9	9	7	2	4	8	8	5	9	5	0	2	130	6.2
2<5	0-3	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.1	.0	.1	.0	.3	.0	.0	.2	19	.9
	4-10	.1	.0	.2	.1	.2	.1	.2	.1	.1	.2	.2	.1	.3	.0	.3	.1	.0	.0	49	2.3
	11-21	.4	.2	.4	.5	.4	.2	.2	.3	.3	.2	.2	.2	.2	.2	.4	.3	.0	.0	98	4.7
	22+	.8	.1	.4	.6	.6	.5	.4	.2	.2	.3	.4	.2	.7	.4	.1	.3	.0	.0	130	6.2
	TOTAL	28	6	25	25	26	18	18	11	14	15	19	11	27	12	23	14	0	4	296	14.1
5<10	0-3	.0	.0	.2	.0	.0	.0	.0	.1	.2	.0	.0	.0	.2	.1	.1	*	.0	.2	27	1.3
	4-10	.6	.3	.5	.4	.1	.1	.3	.4	.3	.1	.4	.4	.3	.4	.4	.2	.0	.0	117	5.6
	11-21	1.1	.6	.9	.6	.8	.6	.8	.6	.8	.8	.6	.6	1.5	1.1	1.3	.9	.0	.0	287	13.6
	22+	.7	.3	.4	.1	.7	.8	.8	.6	.7	.7	.8	.6	.8	.8	.6	.9	.0	.0	215	10.2
	TOTAL	52	25	43	26	34	33	40	35	43	34	39	33	59	51	52	42	0	5	646	30.7
10+	0-3	*	*	.1	*	*	.0	.1	*	.2	*	.2	.0	.2	.0	.2	.1	.0	.5	39	1.9
	4-10	1.2	.7	.6	.7	.9	.3	.8	.7	.9	.4	.7	.3	1.2	.6	.7	.7	.0	.0	239	11.3
	11-21	2.1	1.0	1.2	1.1	1.0	1.2	1.0	1.0	1.8	.9	.9	1.1	2.0	1.2	1.8	.9	.0	.0	429	20.4
	22+	1.2	.4	.4	.3	.9	.5	.3	.4	.4	.2	.4	.7	1.0	.9	.7	1.1	.0	.0	209	9.9
	TOTAL	97	46	49	46	60	42	46	45	69	32	47	44	95	57	70	61	0	10	916	43.5
	TOTAL	185	82	146	114	147	114	127	105	152	92	112	99	197	130	157	126	0	21	2106	100.0
	PCT	8.8	3.9	6.9	5.4	7.0	5.4	6.0	5.0	7.2	4.4	5.3	4.7	9.4	6.2	7.5	6.0	.0	1.0	100.0	

DECEMBER

PERIOD: (PRIMARY) 1944-1969  
(OVER-ALL) 1900-1969

AREA 0008 DUTCH HARBOR  
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET,NH >4/8),AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	5.1	1.3	4.1	18.3	28.3	10.3	2.1	.0	.3	.3	69.9	30.1	389
06009	8.3	.3	2.4	15.2	30.4	8.9	.6	.0	.3	.0	66.4	33.6	336
12015	9.7	.0	2.7	10.6	33.5	10.3	1.5	.3	.0	.6	69.2	30.8	331
18021	7.5	.0	2.7	11.1	30.8	10.8	1.2	.9	.3	.3	65.6	34.4	334
TOT	105	6	42	194	426	140	19	4	3	4	943	447	1390
PCT	7.6	.4	3.0	14.0	30.6	10.1	1.4	.3	.2	.3	67.8	32.2	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NH) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	1.6	2.0	6.8	13.5	21.3	54.3	385
06009	1.2	1.2	5.1	15.5	27.8	49.3	325
12015	3.1	.6	5.8	13.5	30.0	47.1	327
18021	2.1	1.8	3.3	11.8	29.3	51.7	331
TOT	27	22	73	187	370	699	1378
PCT	2.0	1.6	5.3	13.6	26.9	50.7	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NH) AND/OR  
CEILING HGT (FEET,NH >4/8),BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND5+	NH <5/8 AND 5+	TOTAL OBS
00003	4.9	12.5	38.4	33.5	28.1	385
06009	8.7	12.2	37.3	30.7	31.9	335
12015	9.8	13.5	32.7	40.7	26.6	327
18021	7.6	11.5	30.8	37.8	31.4	331
TOT	105	171	482	490	406	1378
PCT	7.6	12.4	35.0	35.6	29.5	100.0



DECEMBER

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AREA 0008 DUTCH HARBR  
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TABLE 13

TEMP F	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP										TOTAL OBS	PCT FREQ
	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100				
50/54	.0	.0	.0	.0	.0	.2	.2	.0			4	.3
45/49	.0	.0	.0	.0	.2	1.4	1.3	.5			44	3.3
40/44	.0	.0	.2	.2	2.2	4.7	8.2	12.2			368	27.7
35/39	.0	.0	.2	1.1	4.6	10.2	13.6	16.9			618	46.5
30/34	.0	.0	.0	.9	1.4	3.6	5.3	5.9			231	17.4
25/29	.0	.0	.0	.0	.8	1.3	1.1	1.4			61	4.6
20/24	.0	.0	.0	.0	.0	.0	.0	.2			3	.2
TOTAL	0	0	6	29	121	286	394	493			1329	100.0
PCT	.0	.0	.5	2.2	9.1	21.5	29.6	37.1				

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP											VAR	CALM
N	NE	E	SE	S	SW	W	NW					
.0	.1	.1	.0	.1	.0	.1	.0				.0	.0
.3	.2	.2	.7	.8	.2	.2	.2				.0	.5
1.4	2.0	5.1	5.1	5.2	3.9	3.0	1.5				.0	.4
5.4	6.0	5.0	5.4	6.5	5.2	7.1	5.3				.0	.5
4.2	3.5	.6	.4	.3	.6	2.1	5.6				.0	.1
1.8	1.1	.0	.1	.1	.2	.2	1.1				.0	.2
.0	.2	.0	.0	.0	.0	.0	.1				.0	.0
175	174	146	155	173	134	168	184				0	20
13.2	13.1	11.0	11.7	13.0	10.1	12.6	13.8				.0	1.5

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR										TOTAL OBS
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN		
00003	52	47	44	38	30	25	22	37.8		593
06009	52	47	43	38	30	25	22	37.3		527
12015	51	45	42	37	30	27	23	37.0		450
18021	52	46	44	37	28	25	22	37.0		541
TOT	52	46	43	38	30	25	22	37.3		2111

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR										TOTAL OBS
HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN			
00003	.0	3.4	8.5	26.3	30.0	31.8	82			377
06009	.0	2.0	11.3	19.7	31.3	35.7	83			345
12015	.0	2.6	7.9	18.4	26.6	44.6	85			267
18021	.0	2.3	8.6	20.1	29.9	39.1	84			348
TOT	0	35	122	286	396	498	84			1337

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	21	25	29	33	37	41	45	49	TOT	W	WD
	24	28	32	36	40	44	48	52		FOG	FOG
9/10	.0	.0	.0	.0	.0	.0	.1	.1	2	.0	.1
7/8	.0	.0	.0	.0	.0	.0	.3	.0	4	.0	.3
5	.0	.0	.0	.0	.0	.4	.3	.1	13	.1	.8
4	.0	.0	.0	.1	.1	.9	.9	.0	31	.1	1.9
3	.0	.0	.0	.0	.3	1.3	.4	.0	31	.3	1.7
2	.0	.0	.0	.1	1.8	3.5	.3	.0	91	.2	5.6
1	.0	.0	.0	.1	2.5	2.6	.1	.0	82	.2	5.0
0	.0	.0	.0	.4	8.2	3.9	.1	.0	199	.3	12.3
-1	.0	.0	.0	.0	7.9	1.6	.1	.0	158	.1	9.9
-2	.0	.0	.0	2.0	10.1	1.0	.0	.0	207	.1	13.0
-3	.0	.0	.0	3.0	4.2	.3	.0	.0	118	.1	7.4
-4	.0	.0	.3	5.2	4.1	.6	.0	.0	162	.2	10.1
-5	.0	.0	.6	4.6	3.7	.1	.1	.0	145	.1	9.1
-6	.0	.0	.8	2.6	1.6	.2	.0	.0	83	.0	5.2
-7/-8	.0	.0	2.3	3.6	1.0	.0	.0	.0	109	.0	6.9
-9/-10	.0	.7	1.9	2.0	.3	.0	.0	.0	78	.0	4.9
-11/-13	.0	1.5	1.2	.5	.0	.0	.0	.0	51	.0	3.2
-14/-16	.1	.6	.2	.0	.0	.0	.0	.0	13	.0	.8
-17/-19	.1	.3	.0	.0	.0	.0	.0	.0	5	.0	.3
TOTAL	2	48	116	388	727	258	40	3	1582	24	1558
PCT	.1	3.0	7.3	24.5	46.0	16.3	2.5	.2	100.0	1.5	98.5

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N					NE					TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47			
<1	.0	.1	.0	.0	.0	.0	.3	.0	.0	.0	1	.0	2
1-2	.0	1.8	.4	.0	.0	.4	1.1	.3	.0	.0	17	.0	13
3-4	.0	.8	2.0	.0	.0	.0	1.3	3.2	.4	.0	21	.0	37
5-6	.0	.1	2.6	.5	.0	.0	.5	2.2	.8	.0	25	.0	27
7	.0	.1	1.4	1.1	.0	.0	.0	.9	.3	.0	20	.0	9
8-9	.0	.0	.3	.7	.0	.0	.0	.1	.0	.0	7	.0	1
10-11	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	1	.0	1
12	.0	.0	.0	.0	.4	.0	.0	.1	.3	.0	3	.0	3
13-16	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	2	.1	3
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
20-22	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	3	.0	0
23-25	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	3	.0	0
26-32	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	1	.0	1
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	0	23	51	20	10	3	24	52	16	1	104	.0	97
PCT	.0	3.0	6.7	2.6	1.3	.4	3.2	6.8	2.1	.1	13.7	.1	12.8

HGT	E					SE					TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47			
<1	.1	.1	.0	.0	.0	.0	.1	.0	.0	.0	2	.0	1
1-2	.0	1.4	.8	.0	.0	.1	2.1	.5	.0	.0	17	.0	21
3-4	.0	.4	2.0	.4	.0	.0	.4	2.4	.0	.0	21	.0	21
5-6	.0	.1	2.1	.5	.1	.0	.1	1.8	.5	.0	22	.0	19
7	.0	.0	.4	.7	.0	.0	.0	.3	.1	.1	8	.0	4
8-9	.0	.0	.1	.3	.3	.0	.0	.4	1.6	.0	5	.0	15
10-11	.0	.0	.0	.7	.3	.0	.0	.3	.3	.0	7	.0	4
12	.0	.0	.1	.4	.4	.0	.0	.3	.1	.0	7	.0	3
13-16	.0	.0	.0	.4	1.2	.0	.0	.0	.1	.5	12	.0	5
17-19	.0	.0	.0	.1	.7	.0	.0	.0	.0	.1	7	.0	1
20-22	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	4	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	1	16	42	26	25	1	21	45	21	6	114	.0	94
PCT	.1	2.1	5.5	3.4	3.3	.1	2.8	5.9	2.8	.8	15.0	.0	12.4

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S										SW										TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	48+	TOTAL
<1	.0	.1	.0	.0	.0	.0	1	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
1-2	.4	1.3	.7	.0	.0	.0	18	.3	.5	.1	.0	.0	.0	7	.0	.0	.0	.0	.0	.0	.0	.0	7
3-4	.0	.0	1.7	.1	.0	.0	19	.0	.7	.7	.0	.0	.0	10	.0	.0	.0	.0	.0	.0	.0	.0	10
5-6	.0	.5	2.2	.1	.0	.0	22	.0	.0	.8	.1	.1	.0	8	.0	.0	.0	.1	.0	.0	.0	.0	8
7	.0	.0	1.4	.8	.0	.0	17	.0	.1	.8	.4	.0	.0	10	.0	.0	.0	.0	.0	.0	.0	.0	10
8-9	.0	.0	.4	.4	.1	.0	3	.0	.0	.0	.7	.0	.0	5	.0	.0	.0	.0	.0	.0	.0	.0	5
10-11	.0	.0	.0	.4	.0	.0	3	.0	.0	.0	.1	.0	.0	1	.0	.0	.0	.0	.0	.0	.0	.0	1
12	.0	.0	.0	.5	.1	.0	5	.0	.0	.0	.3	.0	.0	2	.0	.0	.0	.0	.0	.0	.0	.0	2
13-16	.0	.0	.0	.4	.1	.0	4	.0	.0	.0	.3	.0	.1	5	.0	.0	.0	.3	.0	.1	.0	.0	5
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.3	.0	.0	3	.0	.0	.0	.0	.0	.0	2	.0	.0	.0	.0	.0	.0	.0	.0	2
23-25	.0	.0	.0	.1	.0	.0	1	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	3	20	49	24	4	0	100	2	10	18	14	3	3	50	.0	.0	.0	.0	.0	.0	.0	.0	50
PCT	.4	2.6	6.4	3.2	.5	.0	13.2	.3	1.3	2.4	1.8	.4	.4	6.6									

HGT	W										NW										TOTAL	48+	TOTAL	GRAND TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	48+	TOTAL	GRAND TOTAL
<1	.1	.3	.0	.0	.0	.0	3	.1	.4	.0	.0	.0	.0	4	.0	.0	.0	.0	.0	.0	.0	.0	4	14
1-2	.0	.5	.5	.4	.0	.0	8	.3	.8	.9	.0	.0	.0	15	.0	.0	.0	.0	.0	.0	.0	.0	15	116
3-4	.0	1.2	1.1	.1	.0	.0	20	.0	.4	2.9	.5	.0	.0	29	.0	.0	.0	.0	.0	.0	.0	.0	29	178
5-6	.0	.4	1.6	.1	.0	.0	16	.1	.3	1.3	.4	.0	.0	16	.0	.0	.0	.0	.0	.0	.0	.0	16	155
7	.0	.0	1.1	.5	.1	.0	13	.0	.1	.9	.7	.0	.0	13	.0	.0	.0	.0	.0	.0	.0	.0	13	94
8-9	.0	.1	.7	.5	.1	.0	11	.0	.0	.1	.4	.0	.0	4	.0	.0	.0	.0	.0	.0	.0	.0	4	55
10-11	.0	.0	.1	.7	.3	.0	8	.0	.0	.5	.4	.1	.0	8	.0	.0	.0	.1	.0	.0	.0	.0	8	33
12	.0	.0	.0	.9	.1	.0	8	.0	.0	.3	.1	.3	.0	5	.0	.0	.0	.3	.0	.0	.0	.0	5	36
13-16	.0	.0	.1	.9	.5	.0	12	.0	.0	.0	.1	.1	.0	2	.0	.0	.0	.1	.0	.0	.0	.0	2	45
17-19	.0	.0	.0	.0	.3	.0	2	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0	10
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0	13
23-25	.0	.0	.0	.0	.1	.0	3	.0	.0	.0	.0	.0	.0	1	.0	.0	.0	.0	.0	.0	.0	.0	1	10
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0	1
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
TOTAL	1	19	39	31	12	2	104	4	15	53	21	4	0	97	.0	.0	.0	.0	.0	.0	.0	.0	97	760
PCT	.1	2.5	5.1	4.1	1.6	.3	13.7	.5	2.0	7.0	2.8	.5	.0	12.8									12.8	100.0

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1969

DECEMBER

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL OBS
	0-3	4-10	11-21	22-23	34-47	48+	48+	48+	48+	48+	
<1	.8	1.4	.0	.0	.0	.0	.0	.0	.0	.0	17
1-2	1.4	9.6	4.2	.0	.0	.0	.0	.0	.0	.0	116
3-4	.0	5.8	15.7	1.8	.0	.0	.0	.0	.0	.0	178
5-6	.1	2.1	14.7	3.1	.3	.0	.0	.0	.0	.0	155
7	.0	.4	7.2	4.5	.3	.0	.0	.0	.0	.0	94
8-9	.0	.1	2.1	4.5	.5	.0	.0	.0	.0	.0	55
10-11	.0	.0	.9	2.8	.7	.0	.0	.0	.0	.0	33
12	.0	.0	.8	2.6	1.3	.0	.0	.0	.0	.0	36
13-16	.0	.0	.1	2.5	3.0	.3	.0	.0	.0	.0	45
17-19	.0	.0	.0	.1	1.0	.1	.0	.0	.0	.0	10
20-22	.0	.0	.0	.5	.8	.4	.0	.0	.0	.0	13
23-25	.0	.0	.0	.1	.7	.5	.0	.0	.0	.0	10
26-32	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	1
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	18	148	349	173	65	10	10	10	10	10	763
PCT	2.4	19.4	45.7	22.7	8.5	1.3	1.3	1.3	1.3	1.3	100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.3	4.1	7.8	5.8	2.1	1.9	.6	.4	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	186	4
6-7	.1	.0	3.0	5.1	3.6	1.6	1.4	1.6	1.5	.8	.8	.9	.3	.0	.0	.0	.0	.0	.0	165	8
8-9	.0	.1	5.6	3.6	5.9	5.5	2.1	.8	2.0	1.0	.5	.5	.0	.0	.0	.0	.0	.0	.0	221	7
10-11	.0	.0	1.3	2.0	2.8	3.1	2.4	1.0	2.5	1.0	.9	.1	.5	.0	.0	.0	.0	.0	.0	140	10
12-13	.0	.0	.4	1.3	.4	1.0	.8	.9	1.4	.6	.3	.3	.3	.0	.0	.0	.0	.0	.0	59	11
>13	.0	.0	.0	.3	.1	.1	.1	.4	.4	.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	13	11
INDET	1.1	.0	.0	.1	.4	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	15	3
TOTAL	12	34	144	145	122	106	61	40	65	27	20	15	8	0	0	0	0	0	0	799	7
PCT	1.5	4.3	18.0	18.1	15.3	13.3	7.6	5.0	8.1	3.4	2.5	1.9	1.0	.0	.0	.0	.0	.0	.0	100.0	

ANNUAL

PERIOD: (PRIMARY) 1942-1970  
(OVER-ALL) 1859-1970

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN SHWR	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCPN AT		TOTAL PCPN	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
				FRZG PCPN	SNOW	OTHER PCPN		OB	TIME			FG WD	SMOKE HAZE	DUST BLWG	NO SIG WEA	
N	.3		.3	*	.6	*	*	*	1.2	306	.0	.3	*	*	4.8	1654
NNE	.2		.2	.0	.3	*	*	*	.7	176	.0	.2	*	.0	2.5	872
NE	.5		.3	.0	.4	*	*	*	1.3	335	.0	.3	*	*	2.9	1198
ENE	.4		.4	.0	.2	.0	*	*	1.0	269	.0	.2	*	*	2.3	938
E	.7		.5	*	.2	.0	.0	*	1.4	367	*	.4	*	*	3.1	1293
ESE	.8		.4	.0	.1	*	.0	*	1.2	320	.0	.4	*	.0	2.3	1023
SE	.9		.6	.0	.2	*	*	*	1.7	454	.0	.8	*	*	3.5	1617
SSE	.6		.5	.0	.1	.0	*	*	1.2	314	*	.7	*	*	3.1	1328
S	.8		.7	.0	.2	*	*	*	1.7	447	.0	1.3	.1	*	4.7	2033
SSW	.5		.4	.0	.1	.0	.0	*	1.0	261	.0	.8	*	*	3.3	1338
SW	.6		.6	.0	.2	.0	*	*	1.5	389	.0	1.2	*	*	4.9	2002
WSW	.5		.1	.0	.2	*	*	*	1.2	316	*	.8	*	*	5.8	2058
W	.6		.5	*	.4	.0	.1	*	1.7	442	.0	1.0	.1	*	9.8	3275
WNW	.2		.2	.0	.3	*	*	*	.8	209	.0	.4	*	*	5.5	1773
NW	.3		.2	.0	.5	*	*	*	1.1	276	.0	.5	*	*	5.7	1921
NNW	.2		.1	*	.4	*	*	*	.7	192	.0	.3	*	*	4.2	1367
VAR	.0		.0	.0	.0	.0	.0	*	.0	0	.0	.0	.0	.0	*	6
CALM	*		.1	.0	*	.0	.0	*	.2	41	.0	.4	*	*	1.2	472
TOT OBS	2104	285	1676	6	1165	18	80			5114	5	2640	174	24	18211	26168
TOT PCT	8.0	1.1	6.4	*	4.5	.1	.3		19.5		*	10.1	.7	.1	69.6	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCPN AT		TOTAL PCPN	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
				FRZG PCPN	SNOW	OTHER PCPN		OB	TIME			FG WD	SMOKE HAZE	DUST BLWG	NO SIG WEA	
00003	6.9	1.2	5.7	*	4.7	.1	.3	18.3	1314	*	*	10.2	.8	.1	70.6	7191
06009	8.2	.9	5.9	*	4.3	*	.3	18.7	1215	*	*	10.3	.7	.2	70.0	6487
12015	8.4	1.1	6.4	*	3.7	.1	.3	19.1	1207	*	*	8.3	.4	.1	72.1	6306
18021	8.7	1.1	7.6	.0	5.1	.1	.3	22.0	1409	*	*	11.5	.6	*	65.8	6412
TOT	2118	286	1684	6	1173	18	80		5145	5	2662	174	24	18386	26396	
PCT	8.0	1.1	6.4	*	4.4	.1	.3	19.5		*	*	10.1	.7	.1	69.7	100.0

ANNUAL

PERIOD: (PRIMARY) 1942-1970  
(OVER-ALL) 1899-1970

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-3	4-10	11-21	22-33	34-47	48+	TOTAL OBS	PCT FREQ	MEAN SPD		00	03	06	09	12
N	.4	2.0	2.4	1.3	.3	*	2092	6.5	15.7		6.4	6.2	6.9	5.6	6.1
NNE	.2	1.1	1.3	.6	.1	*	1073	3.3	15.5		3.3	2.9	3.4	3.3	3.1
NE	.5	1.5	1.7	.9	.2	.0	1549	4.8	14.7		5.1	5.2	5.1	4.1	3.8
ENE	.1	1.0	1.4	.7	.2	*	1106	3.4	16.4		3.4	5.5	2.9	3.9	3.5
E	.3	1.4	1.9	.9	.3	*	1561	4.8	16.3		5.4	4.0	5.3	3.2	4.4
ESE	.1	.9	1.5	.9	.3	*	1221	3.8	18.0		3.5	5.4	3.4	5.6	3.8
SE	.4	1.6	2.5	1.3	.3	*	2025	6.3	16.5		6.5	5.1	6.8	6.6	5.9
SSE	.2	1.3	2.0	1.2	.2	*	1596	4.9	17.0		4.6	6.9	4.3	6.4	4.9
S	.4	2.2	3.1	1.5	.4	*	2460	7.6	16.0		7.6	7.6	7.9	5.8	7.4
SSW	.2	1.3	2.2	1.1	.3	*	1661	5.1	16.8		5.2	4.1	4.9	6.4	5.2
SW	.5	2.4	3.2	1.6	.3	*	2627	8.1	15.9		8.4	8.2	8.5	7.5	7.4
WSW	.2	1.8	3.2	1.8	.4	.1	2449	7.6	18.0		7.2	7.7	6.9	8.1	8.3
W	.5	3.2	5.0	2.6	.6	.1	3898	12.0	16.9		12.1	10.2	11.8	11.5	13.4
WNW	.2	1.8	2.9	1.5	.3	*	2172	6.7	17.0		6.6	7.4	6.5	7.4	7.3
NW	.4	2.2	3.3	1.6	.4	*	2548	7.9	16.3		7.9	7.0	8.2	7.9	7.2
NNW	.2	1.4	2.1	1.1	.3	*	1660	5.1	16.9		5.0	5.9	4.9	5.9	5.3
VAR	*	*	.0	.0	.0	.0	6	*	1.8		*	.0	*	.0	*
CALM	2.1	8836	12910	6667	1596	176	685	2.1	.0		1.9	.7	2.3	.8	2.2
TOT OBS	2204	27.3	35.9	20.6	4.9	.5	32389	100.0	16.2		7882	1164	7075	1074	5703
TOT PCT	6.8										100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD			00	03	06	09	12
N	1.8	4.1	2.8	1.1	.1	3165	9.8	15.6			9.7	9.1	10.3	8.8	9.2
NE	1.6	3.3	2.3	.9	.1	2655	8.2	15.4			8.4	10.7	8.0	8.0	7.3
E	1.2	3.4	2.6	1.1	.2	2782	8.6	17.0			8.9	9.4	8.7	8.8	8.2
SE	1.7	4.3	3.6	1.3	.2	3621	11.2	16.7			11.0	11.9	11.1	13.0	10.7
S	1.8	5.4	3.9	1.4	.2	4121	12.7	16.3			12.7	11.7	12.8	12.2	13.4
SW	2.3	6.1	5.1	1.8	.4	5076	15.7	16.9			15.6	16.0	15.4	15.6	15.8
W	2.3	7.9	5.9	2.4	.3	6070	18.7	17.0			18.7	17.6	18.3	18.9	20.6
NW	1.8	5.5	4.0	1.5	.2	4208	13.0	16.5			12.9	13.0	13.1	13.8	12.5
VAR	*	.0	.0	.0	.0	6	*	1.8			*	.0	*	.0	*
CALM	2.1	12957	9757	3759	529	685	2.1	.0			1.9	.7	2.3	.8	2.2
TOT OBS	5387	40.0	20.1	11.6	1.6	32389	100.0	16.2			7882	1164	7075	1074	5703
TOT PCT	16.6										100.0	100.0	100.0	100.0	100.0

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TABLE 4

## PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	WIND SPEED (KNOTS)				PCT		TOTAL OBS
	1-3	4-10	11-21	22-33	34-47	48+	
00003	5.0	27.4	39.2	20.8	5.4	.5	9044
06009	5.1	27.1	40.0	20.3	4.8	.6	8148
12015	2.7	26.5	42.0	21.3	5.1	.7	7049
18021	5.6	28.0	38.7	20.0	4.4	.5	8142
TOT	1514	8835	12910	6667	1596	176	32383
PCT	4.7	27.3	39.9	20.6	4.9	.5	100.0

TABLE 5

## PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION							TOTAL OBS	MEAN CLOUD COVER
	0-2	3-4	5-7	8 &	OBSCD	8 &	OBSCD		
N	.6	.5	2.1	3.2	133)			6.5	
NNE	.3	.2	.9	2.0	707			6.6	
NE	.3	.3	1.0	2.6	875			6.8	
ENE	.3	.2	.8	2.2	725			6.7	
E	.2	.2	1.0	3.5	1007			7.2	
ESE	.1	.1	.8	2.9	816			7.4	
SE	.3	.3	1.1	4.0	1184			7.1	
SSE	.3	.3	.9	3.7	1077			7.1	
S	.5	.5	1.5	5.3	1612			7.0	
SSW	.4	.3	1.1	3.5	1093			6.9	
SW	.5	.5	1.8	4.4	1470			6.9	
WSW	.5	.8	2.1	4.5	1629			6.7	
W	1.0	1.4	4.1	6.4	2684			6.5	
WNW	.5	.8	2.5	3.3	1470			6.4	
NW	.5	.8	2.7	3.4	1561			6.4	
NNW	.5	.6	1.8	2.5	1129			6.4	
VAR	*	*	.0	*	6			5.8	
CALM	.1	.2	.4	1.2	378			6.7	
TOT OBS	1410	1649	5546	12148	20753			6.7	
TOT PCT	6.9	7.9	26.7	58.5	100.0				

TABLE 6

## PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH &gt;4/8)

## AND OCCURRENCE OF NH &lt;5/8 BY WIND DIRECTION

WIND DIR	AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION														NH <5/8 ANY HGT	TOTAL OBS
	000	150	300	600	1000	2000	3500	5000	6500	8000+	5000	6500	8000+	5000		
N	.5	*	.2	1.2	1.9	.8	.1	*	*	*	*	*	*	*	1.5	1330
NNE	.2	*	.1	.6	1.2	.5	.1	*	*	*	*	*	*	*	.7	707
NE	.4	*	.2	.7	1.4	.5	.1	*	*	*	*	*	*	*	.9	875
ENE	.4	.1	.1	.6	1.0	.4	.1	*	*	*	*	*	*	*	.8	725
E	.6	.1	.2	1.0	1.5	.6	.1	*	*	*	*	*	*	*	.8	1007
ESE	.5	.1	.2	.8	1.2	.5	.1	*	*	*	*	*	*	*	.5	816
SE	1.0	.1	.2	1.0	1.5	.6	.1	*	*	*	*	*	*	*	1.0	1184
SSE	.9	*	.3	1.0	1.2	.5	.1	*	*	*	*	*	*	*	1.0	1077
S	1.6	.1	.4	1.4	1.8	.7	.2	*	*	*	*	*	*	*	1.6	1612
SSW	.9	.1	.3	1.0	1.2	.6	.1	*	*	*	*	*	*	*	1.0	1093
SW	1.1	.1	.4	1.2	1.9	.8	.2	*	*	*	*	*	*	*	1.5	1470
WSW	.7	.1	.4	1.5	2.2	.9	.2	.1	*	*	*	*	*	*	1.8	1629
W	1.0	.1	.5	2.4	3.4	1.7	.4	.1	*	*	*	*	*	*	3.3	2684
WNW	.5	*	.2	1.3	2.1	.9	.2	*	*	*	*	*	*	*	1.9	1470
NW	.5	.1	.3	1.2	2.1	1.1	.2	*	*	*	*	*	*	*	2.0	1561
NNW	.3	*	.2	.9	1.7	.7	.2	*	*	*	*	*	*	*	1.4	1129
VAR	.0	.0	*	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	*	*	6
CALM	.4	*	*	.2	.4	.2	*	*	*	*	*	*	*	*	.4	378
TOT OBS	2372	201	874	3747	5727	2491	510	111	72	68	4580	20753	100.0			
TOT PCT	11.4	1.0	4.2	18.1	27.6	12.0	2.5	.5	.3	.3	22.1	100.0				



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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	.4	.6	.6	.6	.7	.7	.7	.7
= OR >5000	.8	1.1	1.2	1.2	1.2	1.2	1.2	1.2
= OR >3500	2.3	3.4	3.6	3.6	3.7	3.7	3.7	3.7
= OR >2000	8.9	13.9	15.3	15.6	15.7	15.7	15.7	15.7
= OR >1000	21.1	36.0	41.3	42.7	43.0	43.3	43.3	43.3
= OR >600	26.4	48.1	57.5	60.1	60.8	61.2	61.3	61.3
= OR >300	27.3	50.4	60.9	63.9	64.8	65.3	65.5	65.5
= OR >150	27.4	50.8	61.6	64.7	65.7	66.3	66.4	66.5
= OR > 0	27.7	52.5	64.9	69.4	71.7	74.9	77.5	77.9
TOTAL	5759	10920	13486	14436	14916	15564	16108	16186

TOTAL NUMBER OF OBS: 20790

PCT FREQ NH <5/8: 22.1

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

TOTAL								
0	1	2	3	4	5	6	7	8
2.4	2.9	5.7	5.6	5.4	5.8	10.2	12.1	39.6
								10.4 21950

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.1	*	.1	.1	.1	.1	.1	*	.1	.1	.1	*	.1	*	*	*	.0	*	284	1.1
NO PCP	.2	.1	.1	.1	.2	.2	.4	.4	.8	.5	.6	.4	.5	.2	.2	.1	.0	.2	1387	5.3
TOTAL	63	24	47	43	79	75	146	116	240	139	181	127	155	60	72	40	0	64	1671	6.4
PCP	.1	*	.1	.1	.2	.1	.2	.1	.2	.1	.1	.1	.1	*	*	*	.0	*	422	1.6
NO PCP	.1	*	.1	*	.1	.1	.2	.2	.2	.1	.2	.2	.2	.1	.1	*	.0	*	515	2.0
TOTAL	47	19	56	43	69	57	96	65	102	65	67	64	81	38	34	22	0	12	937	3.6
PCP	.2	.1	.2	.2	.2	.2	.2	.2	.3	.1	.2	.1	.2	.1	.1	.1	.0	*	749	2.9
NO PCP	.1	.1	.1	.1	.1	.1	.2	.2	.3	.2	.3	.3	.3	.1	.1	.1	*	.1	713	2.7
TOTAL	64	45	86	73	93	95	127	108	135	84	132	104	113	64	69	44	1	25	1462	5.6
PCP	.3	.2	.4	.3	.4	.4	.6	.4	.5	.3	.4	.3	.4	.2	.3	.2	.0	.1	1432	5.5
NO PCP	.4	.3	.4	.2	.4	.4	.6	.4	.7	.6	.8	.7	1.1	.5	.5	.3	.0	.1	2204	8.5
TOTAL	202	112	191	132	208	194	303	208	306	223	324	251	380	195	212	142	0	47	3636	13.9
PCP	.4	.2	.4	.3	.4	.4	.5	.4	.5	.4	.5	.5	.7	.3	.4	.3	.0	*	1722	6.6
NO PCP	1.6	.9	1.0	.8	1.1	.9	1.3	1.2	1.9	1.3	1.9	2.3	3.8	2.0	2.1	1.5	*	.3	6764	25.9
TOTAL	518	291	373	275	399	334	474	406	627	434	644	738	1174	595	651	463	1	89	8486	32.6
PCP	.2	.1	.1	.1	.1	*	.1	.1	.1	.1	.1	.1	.3	.1	.1	.1	.0	*	488	1.9
NO PCP	2.8	1.4	1.6	1.3	1.6	1.0	1.7	1.5	2.2	1.4	2.3	2.8	5.0	3.0	3.2	2.4	*	.9	9386	36.0
TOTAL	758	373	444	366	432	268	462	413	614	390	638	765	1366	820	877	655	4	229	9874	37.9
TOTAL	1652	870	1197	932	1280	1023	1608	1316	2024	1335	1986	2049	3269	1772	1915	1366	6	466	26066	100.0
PCT	6.3	3.3	4.6	3.6	4.9	3.9	6.2	5.0	7.8	5.1	7.6	7.9	12.5	6.8	7.3	5.2	*	1.8	100.0	

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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.0	.2	165	.5
	4-10	.1	*	.1	.1	.1	.1	.1	.1	.2	.1	.2	.1	.2	.1	.1	*	.0		621	1.9
	11-21	*	*	*	*	.1	.1	.2	.2	.4	.2	.3	.2	.2	.1	.1	.1	.0		702	2.2
	22+	*	*	*	*	.1	.1	.1	.1	.1	.1	.1	.1	.1	*	*	*	.0		299	.9
	TOTAL	64	28	56	52	87	82	160	127	252	144	189	131	166	61	78	43	0	67	1787	5.6
1/2<1	0-3	*	*	.0	.0	.0	*	*	*	*	*	*	*	*	*	*	.0	.0	*	42	.1
	4-10	.1	*	*	*	*	*	.1	.1	.1	*	.1	.1	.1	*	.1	*	.0		272	.9
	11-21	*	*	.1	*	.1	.1	.1	.1	.1	.1	.1	.1	.1	*	.1	*	.0		401	1.3
	22+	.1	*	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	*	*	*	.0		312	1.0
	TOTAL	50	26	58	47	74	58	98	69	112	68	76	70	89	46	42	32	0	12	1027	3.2
1<2	0-3	*	.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.1	73	.2
	4-10	.1	*	.1	.1	.1	*	.1	.1	.1	.1	.1	.1	.1	.1	.1	*	.0		367	1.2
	11-21	.1	.1	.1	.1	.1	.1	.2	.1	.2	.1	.2	.1	.2	.1	.1	.1	.0		618	1.9
	22+	.1	*	.1	.1	.1	.2	.2	.2	.2	.1	.1	.2	.1	.1	.1	.1	.0		621	1.9
	TOTAL	80	49	100	80	103	103	141	124	151	98	143	117	131	84	86	60	1	28	1679	5.3
2<5	0-3	*	*	.1	*	*	*	.1	*	*	*	.1	*	.1	*	.1	*	.0	.2	247	.8
	4-10	.2	.1	.2	.1	.2	.1	.2	.1	.2	.2	.3	.2	.3	.2	.2	.1	.0		908	2.8
	11-21	.3	.2	.2	.2	.3	.3	.4	.3	.4	.3	.4	.3	.5	.2	.3	.2	.0		1566	4.9
	22+	.1	.1	.3	.2	.2	.3	.4	.3	.4	.3	.5	.4	.5	.3	.3	.2	.0		1557	4.9
	TOTAL	252	142	233	146	235	218	357	243	347	250	397	289	436	221	272	172	0	68	4278	13.4
5<10	0-3	.1	*	.1	*	.1	*	.1	.1	.1	.1	.1	.1	.2	.1	.1	*	*	.5	592	1.9
	4-10	.5	.3	.4	.3	.4	.3	.4	.4	.6	.4	.6	.5	1.0	.5	.7	.4	.0		2454	7.7
	11-21	.8	.6	.6	.4	.6	.5	.8	.6	.9	.7	1.0	1.2	1.7	1.0	1.1	.7	.0		4157	13.0
	22+	.6	.3	.4	.3	.4	.4	.6	.5	.7	.5	.8	.9	1.4	.6	.8	.5	.0		3087	9.7
	TOTAL	643	345	483	326	482	386	607	478	736	521	823	866	1359	708	844	534	1	148	10290	32.2
10+	0-3	.2	.1	.2	*	.1	*	.2	.1	.2	.1	.2	.1	.2	.1	.2	.1	*	1.0	972	3.0
	4-10	1.1	.6	.7	.5	.7	.4	.7	.5	1.0	.5	1.1	.9	1.5	.9	1.1	.8	*		4077	12.8
	11-21	1.2	.6	.7	.6	.7	.5	.8	.7	1.0	.8	1.2	1.3	2.4	1.5	1.6	1.1	.0		5327	16.7
	22+	.6	.2	.3	.2	.3	.2	.3	.3	.4	.3	.5	.7	1.2	.8	.8	.6	.0		2470	7.7
	TOTAL	975	470	598	442	555	353	627	515	824	553	957	947	1680	1032	1196	799	4	319	12846	40.3
	TOTAL	2064	1060	1528	1093	1536	1200	1990	1556	2422	1634	2585	2420	3861	2152	2518	1640	6	642	31907	100.0
	PCT	6.5	3.3	4.8	3.4	4.8	3.8	6.2	4.9	7.6	5.1	8.1	7.6	12.1	6.7	7.9	5.1	*	2.0	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET,NH >4/8),AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL ANY HGT	NH <5/8 AND 5+	TOTAL OBS
00003	8.5	1.2	4.1	17.7	27.3	12.2	3.0	.6	.4	.5	75.5	24.5	5665
06009	11.7	.9	4.0	18.0	27.9	11.7	2.6	.5	.4	.3	78.1	21.9	5241
12015	14.4	.6	3.8	17.3	26.3	11.8	1.8	.4	.3	.2	76.9	23.1	4939
18021	11.3	1.1	4.7	18.3	27.6	11.8	2.3	.6	.2	.3	78.3	21.7	5228
TOT	2397	201	876	3757	5750	2510	518	112	72	68	16261	4812	21073
PCT	11.4	1.0	4.2	17.8	27.3	11.9	2.5	.5	.3	.3	77.2	22.8	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	5.5	2.5	4.4	11.8	25.8	49.9	5575
06009	6.0	2.5	4.8	13.4	29.6	43.6	5176
12015	6.8	2.3	4.9	14.8	32.4	38.8	4876
18021	6.4	2.3	4.9	13.2	29.9	43.2	5163
TOT	1287	500	992	2755	6092	9164	20790
PCT	6.2	2.4	4.8	13.3	29.3	44.1	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET,NH >4/8),BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5 AND5+	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00003	8.8	15.6	39.7	37.9	22.4	5575
06009	11.9	18.2	43.7	36.3	20.0	5176
12015	14.6	20.1	45.5	33.5	21.0	4876
18021	11.4	18.4	44.1	36.0	19.9	5163
TOT	2401	3750	8974	7480	4336	20790
PCT	11.5	18.0	43.2	36.0	20.9	100.0

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51-55N 165-172W

TABLE 13

## PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
65/69	.0	.0	.0	*	*	*	*	*	18	.1
60/64	.0	.0	*	*	.1	.1	.2	.2	99	.5
55/59	.0	.0	*	*	.1	.8	1.2	1.2	650	3.3
50/54	*	.0	*	.1	.7	1.6	5.6	6.1	2778	14.0
45/49	.0	.0	*	.2	.7	3.6	7.8	10.3	4494	22.6
40/44	.0	*	.1	.3	1.7	4.3	7.0	11.0	4857	24.4
35/39	.0	.0	.1	.5	2.0	4.5	7.7	10.5	5011	25.2
30/34	.0	.0	.0	.2	.5	1.2	2.4	2.9	1427	7.2
25/29	.0	.0	*	*	.2	.4	.5	1.1	441	2.2
20/24	.0	.0	.0	.0	*	.2	.2	.3	130	.7
15/19	.0	.0	.0	.0	.0	.0	*	*	5	*
TOTAL	2	3	47	262	1181	3297	6483	8635	19910	100.0
PCT	*	*	.2	1.3	5.9	16.6	32.6	43.4		

TABLE 14

## PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
65/69	*	.0	*	*	*	*	*	.0	.0	*
60/64	*	*	.1	.1	.1	.1	*	*	.0	.1
55/59	.2	.2	.3	.5	.6	.7	.4	.2	.0	.2
50/54	.9	.8	1.1	1.5	2.3	3.0	2.6	1.3	.0	.4
45/49	1.9	1.8	1.8	2.1	2.8	3.8	4.7	2.9	.0	.6
40/44	1.8	2.3	3.4	3.6	3.8	4.1	3.0	3.1	*	.6
35/39	2.3	2.2	2.4	3.1	3.3	3.9	4.6	3.1	.0	.4
30/34	1.7	1.1	.5	.3	.3	.5	1.2	1.6	.0	.1
25/29	.7	.4	.1	.1	*	.1	.3	.6	.0	*
20/24	.3	.2	*	*	*	*	*	.1	.0	*
15/19	*	*	.0	.0	.0	.0	.0	.0	.0	.0
TOTAL	1933	1694	1709	2226	2576	3166	3563	2560	2	481
PCT	9.7	8.5	8.6	11.2	12.3	15.9	17.9	12.9	*	2.4

TABLE 15

## MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	69	59	55	44	32	25	12	43.7	9042
06009	68	57	54	43	31	25	12	42.7	8161
12015	67	55	52	41	32	25	16	41.8	7064
18021	69	56	52	42	31	24	13	42.2	8143
TOT	69	57	54	43	32	25	12	42.7	32410

TABLE 16

## PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	2.0	7.6	20.0	33.9	36.5	84	5740
06009	*	1.6	5.4	15.0	32.2	44.7	86	5160
12015	*	1.3	5.1	14.5	32.6	46.4	87	3899
18021	.0	1.3	5.2	14.8	31.5	47.3	87	5201
TOT	2	314	1185	3309	6513	8677	86	20000

ANNUAL

PERIOD: (PRIMARY) 1942-1970  
(OVER-ALL) 1899-1970

AREA 0008 DUTCH HARBOR  
51-55N 165-172W

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	09	13	17	21	25	29	33	37	41	45	49	53	57	61	65	TOT	W	WD
	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68		FOG	FOG
17/19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	*	*	*	5	*	*
14/16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	*	*	*	29	*	.1
11/13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.1	*	*	71	.1	.2
9/10	.0	.0	.0	.0	.0	.0	.0	*	*	.1	.2	.1	.1	*	*	139	.1	.5
7/8	.0	.0	.0	.0	.0	.0	.0	*	.1	.4	.3	.3	.1	*	*	312	.2	1.1
6	.0	.0	.0	.0	.0	.0	*	*	.2	.3	.3	.5	.2	*	*	262	.3	.9
5	.0	.0	.0	.0	.0	.0	*	.2	.6	1.0	.6	.5	.1	*	*	686	.6	2.5
4	.0	.0	.0	.0	.0	.0	*	.3	1.1	1.3	1.1	.7	.1	*	*	1060	1.0	3.7
3	.0	.0	.0	.0	.0	.0	*	.5	1.1	1.0	1.0	.5	*	*	*	960	.7	3.5
2	.0	.0	.0	.0	.0	.0	*	1.6	2.3	3.0	2.1	.8	.1	*	*	2257	1.7	8.2
1	.0	.0	.0	.0	.0	.0	*	.1	1.8	2.1	1.4	.5	*	*	*	1872	.9	7.3
0	.0	.0	.0	.0	.0	.0	*	2.4	3.6	4.3	2.6	.7	*	*	*	3749	2.0	14.6
-1	.0	.0	.0	.0	.0	*	.6	3.5	1.8	1.7	1.4	.2	*	*	*	2245	.7	9.2
-2	.0	.0	.0	.0	*	*	1.2	3.4	1.9	2.2	1.3	.1	*	*	*	2514	.8	10.3
-3	.0	.0	.0	.0	*	*	2.0	3.4	1.9	.8	.6	.1	.0	*	*	1371	.3	5.7
-4	.0	.0	.0	.0	*	.3	1.7	1.8	1.0	1.1	.5	*	.0	*	*	1454	.4	6.0
-5	.0	.0	.0	.0	.1	.5	1.7	1.2	.7	.7	.2	*	.0	*	*	1155	.2	4.8
-6	.0	.0	.0	.0	.1	.6	.9	.6	.3	.2	*	.0	.0	*	*	595	.1	2.5
-7/-8	.0	.0	.0	.0	.3	1.0	1.1	.8	.4	.3	*	.0	.0	*	*	890	.1	3.8
-9/-10	.0	.0	.0	*	.5	.7	.6	.2	.1	.1	*	.0	.0	*	*	515	*	2.2
-11/-13	.0	.0	*	.1	.6	.3	.2	.1	*	*	*	.0	.0	.0	.0	308	*	1.4
-14/-16	.0	.0	*	.3	.2	.1	.1	*	.0	.0	.0	.0	.0	.0	.0	149	*	.7
-17/-19	.0	*	.1	.1	*	*	*	.0	.0	.0	.0	.0	.0	.0	.0	59	.0	.3
-20/-22	.0	*	*	*	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	14	.0	.1
-23/-25	*	*	*	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	7	*	*
TOTAL	2	7	29	132	410	808	2786	5199	4112	4678	3133	1140	200	24	8	22668	2322	20346
PCT	*	*	.1	.6	1.8	3.6	12.3	22.9	18.1	20.6	13.8	5.0	.9	.1	*	100.0	10.2	89.8

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N										NE										TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.1	.5	.0	.0	.0	.0	61	*	.3	.0	.0	.0	.0	37	*	.0	.0	.0	.0	.0	37
1-2	.1	1.2	.9	.0	.0	.0	219	.1	.9	.8	.0	.0	.0	168	.1	.9	.8	.0	.0	.0	168
3-4	*	1.0	1.2	.3	.0	.0	254	*	.5	1.2	.3	.0	.0	208	*	.5	1.2	.3	.0	.0	208
5-6	*	.2	1.1	.4	*	.0	183	*	.2	.9	.2	*	.0	136	*	.2	.9	.2	*	.0	136
7	.0	*	.6	.6	.1	.0	135	*	*	.4	.4	*	.0	89	*	*	.4	.4	*	.0	89
8-9	.0	*	.3	.4	.1	.0	78	.0	*	.1	.3	.1	.0	50	.0	*	.1	.3	.1	.0	50
10-11	.0	*	.1	.2	*	.0	31	.0	.0	*	.2	*	*	27	.0	.0	*	.2	*	*	27
12	.0	.0	*	.1	.1	.0	21	.0	.0	*	.1	.1	.0	18	.0	.0	*	.1	.1	.0	18
13-16	.0	.0	*	.1	.1	.0	23	.0	.0	.0	.2	.1	.0	32	.0	.0	.0	.2	.1	.0	32
17-19	.0	.0	.0	*	*	.0	6	.0	.0	.0	*	*	.0	4	.0	.0	.0	*	*	.0	4
20-22	.0	.0	.0	.0	*	.0	6	.0	.0	.0	*	*	.0	3	.0	.0	.0	*	*	.0	3
23-25	.0	.0	.0	.0	*	.0	3	.0	.0	.0	*	*	.0	3	.0	.0	.0	*	*	.0	3
26-32	.0	.0	.0	.0	.0	.0	1	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	30	298	427	215	51	0	1021	17	194	344	179	43	2	779	17	194	344	179	43	2	779
PCT	.3	2.9	4.2	2.1	.5	.0	10.1	.2	1.9	3.4	1.8	.4	*	7.7	.2	1.9	3.4	1.8	.4	*	7.7

HGT	E										SE										TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.1	.4	.0	.0	.0	.0	50	.1	.4	.0	.0	.0	.0	55	.1	.4	.0	.0	.0	.0	55
1-2	.1	1.0	.8	.0	.0	.0	188	.1	.8	.9	.0	.0	.0	177	.1	.8	.9	.0	.0	.0	177
3-4	*	.6	1.2	.2	.0	.0	198	*	.7	1.4	.4	.0	.0	248	*	.7	1.4	.4	.0	.0	248
5-6	.0	.2	1.1	.4	.1	.0	174	.0	.3	1.6	.6	*	.0	258	.0	.3	1.6	.6	*	.0	258
7	.0	*	.4	.3	.1	*	82	.0	.1	.9	.8	*	.0	186	.0	.1	.9	.8	*	.0	186
8-9	.0	.0	.3	.3	.1	.0	69	.0	*	.2	.8	.1	.0	115	.0	*	.2	.8	.1	.0	115
10-11	.0	*	.1	.3	.1	.0	53	.0	.0	.1	.4	.2	.0	71	.0	.0	.1	.4	.2	.0	71
12	.0	.0	.0	.1	.1	.0	35	.0	.0	.1	.1	.1	.0	33	.0	.0	.1	.1	.1	.0	33
13-16	.0	.0	.0	.2	.4	*	62	.0	.0	.1	.2	.1	.0	38	.0	.0	.1	.2	.1	.0	38
17-19	.0	.0	*	*	.1	*	15	.0	.0	.0	*	*	.0	4	.0	.0	.0	*	*	.0	4
20-22	.0	.0	.0	*	.1	*	11	.0	.0	.0	*	*	.0	3	.0	.0	.0	*	*	.0	3
23-25	.0	.0	.0	*	*	*	5	.0	.0	.0	*	*	.0	0	.0	.0	.0	*	*	.0	0
26-32	.0	.0	.0	.0	.0	*	1	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	18	223	397	195	100	10	943	18	242	531	339	60	1	1191	18	242	531	339	60	1	1191
PCT	.2	2.2	3.9	1.9	1.0	.1	9.3	.2	2.4	5.3	3.4	.6	*	11.8	.2	2.4	5.3	3.4	.6	*	11.8

PERIOD: (PRIMARY) ANNUAL AREA 0008 DUTCH HARBOR  
(OVER-ALL) 1963-1970 51-55N 165-172W

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S										SW										48+	TOTAL																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	1-3	4-10	11-21	22-33	34-47	49+	TOTAL	1-3	4-10	11-21	22-33	34-47																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
<1	.1	.4	.0	.0	.0	.0	50	.1	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0



ANNUAL

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1970

AREA 0008 DUTCH HARBOR  
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TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	2.6	3.5	.0	.0	.0	.0					625
1-2	.8	9.0	7.2	.0	.0	.0					1756
3-4	.4	7.1	12.3	2.3	.0	.0					2268
5-6	.1	2.5	12.5	4.0	.3	.0					1999
7	*	.7	6.9	5.4	.4	*					1381
8-9	.0	.2	2.8	4.5	.8	.0					850
10-11	.0	.1	1.1	3.2	.8	*					530
12	.0	*	.4	1.5	.7	.1					279
13-16	.0	*	.3	2.1	1.4	.1					397
17-19	.0	*	*	.3	.3	*					74
20-22	.0	.0	*	.2	.3	*					64
23-25	.0	.0	.0	.1	.2	.1					44
26-32	.0	.0	.0	.1	.2	.1					33
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	395	2385	4484	2438	557	41					10300
PCT	3.8	23.2	43.5	23.7	5.4	.4					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.9	7.0	10.1	6.1	2.6	1.5	.8	.3	.2	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	3376	4
6-7	*	1.0	5.6	8.8	6.3	3.3	2.2	1.0	1.6	.4	.2	.1	*	.0	.0	.0	.0	.0	.0	3485	6
8-9	.0	.3	1.7	3.4	5.5	3.6	2.2	1.1	1.7	.4	.2	.1	.1	.0	.0	.0	.0	.0	.0	2310	8
10-11	.0	.1	.5	.8	1.5	2.1	1.4	.8	1.3	.4	.3	.1	.2	.0	.0	.0	.0	.0	.0	1072	10
12-13	.0	.0	.1	.2	.2	.6	.6	.3	.6	.1	.2	.1	.2	.0	.0	.0	.0	.0	.0	359	12
>13	.0	.0	.0	*	.2	.1	.1	.2	.4	*	.1	*	.1	.0	.0	.0	.0	.0	.0	149	14
INDET	5.4	*	*	.1	.1	*	*	*	*	.0	.0	*	.0	.0	.0	.0	.0	.0	.0	654	0
TOTAL	717	958	2055	2207	1861	1282	838	427	657	152	118	67	66	.6	0	0	0	0	0	11405	6
PCT	6.3	8.4	18.0	19.4	16.3	11.2	7.3	3.7	5.8	1.3	1.0	.6	.6	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1944-1970  
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AREA 0008 DUTCH HARBOR  
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TABLE 20

PERCENT FREQUENCY OF OCCURRENCE OF SEA TEMP (DEG F) BY MONTH

SEA TMP DEG F	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	PCT
96+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
95/96	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
93/94	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
91/92	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
89/90	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
87/88	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
85/86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
83/84	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
81/82	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
79/80	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
77/78	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
75/76	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
73/74	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
71/72	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
69/70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
67/68	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
65/66	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
63/64	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
61/62	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
59/60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
57/58	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
55/56	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
53/54	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
51/52	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
49/50	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	6	.0
47/48	.4	.1	.2	.6	.7	.8	.1	.4	.2	.6	.1	.0	17	.1
45/46	2.2	.6	1.6	1.6	7.1	31.7	32.0	7.8	13.5	33.3	22.2	3.6	257	.9
43/44	5.4	3.0	2.4	4.0	15.2	31.7	7.3	2.8	9.5	1.5	.0	.0	47	.2
41/42	12.1	7.6	7.2	11.5	32.1	16.4	2.2	1.5	26.2	5.3	.2	.0	846	3.1
39/40	37.0	31.0	22.8	32.7	32.1	6.4	1.0	.4	17.7	22.4	1.9	.2	1589	5.9
37/38	32.3	44.6	45.0	37.7	9.2	1.1	.0	.0	1.1	15.8	5.3	.8	2216	8.2
35/36	6.1	10.2	15.6	9.2	2.2	.4	.0	.0	.3	3.6	22.2	3.6	2362	8.7
33/34	2.7	2.1	3.2	1.6	.8	.0	.0	.0	.0	.9	2.0	16.0	3694	13.6
31/32	.3	.3	.4	.6	.#	.0	.0	.0	.0	.#	1.5	3.0	2925	10.8
29/30	1.4	.4	.4	.2	.0	.0	.0	.0	.0	.0	.0	.1	3185	11.8
27/28	.1	.#	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4478	16.5
TOTAL	1880	2047	2285	2458	2365	2615	2919	2685	2245	2089	1619	1890	27097	100.0
MEAN	38.8	38.2	37.9	38.7	40.9	44.0	47.5	50.3	49.7	46.5	43.1	40.3	43.3	

PERIOD: (PRIMARY) 1944-1970  
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TABLE 21

PRESSURE (MB)

AVERAGE BY HOUR (GMT)

MD	0000	0300	0600	0900	1200	1500	1800	2100	MEAN	TOTAL OBS	EXTREMES			
											MAX	YEAR	DA	HR
JAN	1001	1004	1000	1003	1002	1002	1000	1004	1001	2239	1040	1962	16	12
FEB	1000	1005	1000	1002	1002	1002	1001	1004	1001	2416	1044	1922	06	12
MAR	1010	1013	1011	1012	1011	1012	1010	1012	1011	2513	1039	1966	06	06
APR	1012	1010	1012	1010	1013	1010	1012	1012	1012	2705	1044	1967	22	00
MAY	1011	1013	1011	1008	1012	1010	1012	1009	1011	2918	1044	1964	20	12
JUN	1012	1014	1012	1013	1013	1013	1012	1014	1012	3098	1039	1953	19	06
JUL	1016	1017	1016	1016	1017	1015	1016	1015	1016	3439	1038	1961	30	21
AUG	1013	1014	1013	1012	1013	1013	1013	1011	1013	3003	1038	1960	08	12
SEP	1009	1007	1009	1009	1009	1008	1008	1007	1009	2670	1036	1964	03	06
OCT	1006	1002	1006	1004	1006	1003	1006	1005	1006	2271	1038	1961	09	12
NOV	1003	1030	1004	1000	1005	1000	1004	998	1003	1747	1045	1950	12	09
DEC	1002	1000	1003	999	1003	1001	1002	1000	1002	1983	1048	1965	27	06
ANN	1009	1009	1009	1008	1010	1008	1009	1008	1009	31002				
OBS	7562	1025	6774	1073	5520	1209	6791	1048						

PERCENTILES

MD	1%	5%	25%	50%	75%	95%	99%
JAN	963	974	989	1001	1014	1028	1034
FEB	967	975	990	1000	1012	1026	1031
MAR	973	985	1002	1012	1021	1031	1036
APR	977	986	1004	1013	1021	1033	1039
MAY	981	990	1003	1012	1020	1031	1037
JUN	985	994	1006	1012	1020	1028	1032
JUL	992	1001	1011	1017	1022	1029	1033
AUG	989	995	1007	1014	1020	1027	1032
SEP	971	987	1001	1010	1017	1027	1032
OCT	971	981	997	1007	1015	1026	1032
NOV	965	977	99~	1003	1015	1030	1037
DEC	964	976	991	1001	1013	1030	1042

JANUARY

PERIOD: (PRIMARY) 1943-1970  
(OVER-ALL) 1901-1970

AREA 0009 ADAK  
51-55N 172-180W

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL Obs
				FRZG	SNOW	OTHER FRZN PCPN					FOG	SMOKE	DUST	BLWG	SIG WEA	
N	.2	.0	.0	.0	1.9	.0	.2	2.3	20	.0	.0	.1	.0	.0	3.9	55
NNE	.1	.0	.1	.0	1.9	.0	.1	2.2	19	.0	.2	.0	.0	.0	3.6	52
NE	.2	.0	.3	.0	1.7	.0	.0	2.3	20	.0	.0	.7	.0	.0	4.5	65
ENE	.2	.0	.2	.0	1.0	.0	.0	1.5	13	.0	.0	.0	.0	.0	3.8	46
E	.9	.0	1.0	.0	2.0	.0	.0	3.9	34	.0	.0	.5	.0	.0	5.0	85
ESE	.6	.1	.6	.0	.3	.0	.1	1.6	14	.0	.1	.0	.0	.0	2.0	32
SE	1.3	.2	1.3	.0	1.5	.0	.2	4.2	36	.0	1.0	.6	.0	.0	6.3	104
SSE	.6	.0	.8	.0	.5	.0	.0	1.6	14	.0	.8	.3	.0	.0	3.3	52
S	.5	.0	.7	.0	.1	.0	.0	1.3	11	.0	.3	.0	.0	.0	3.3	42
SSW	.6	.0	.2	.0	.1	.0	.3	1.0	9	.0	.1	.0	.0	.0	2.6	32
SW	.2	.1	.2	.0	.8	.0	.3	1.5	13	.0	.2	.1	.0	.0	3.4	45
WSW	.3	.1	.3	.0	.8	.0	.0	1.6	14	.0	.0	.0	.0	.0	3.4	43
W	.2	.1	.3	.0	1.6	.0	.1	2.3	20	.0	.1	.0	.0	.0	8.0	90
WNW	.1	.0	.0	.0	.6	.0	.1	.7	6	.0	.0	.0	.0	.0	3.4	35
NW	.3	.0	.0	.0	1.0	.0	.0	1.4	12	.0	.2	.0	.0	.0	3.6	45
NNW	.0	.0	.0	.0	.7	.0	.0	.7	6	.0	.0	.0	.0	.0	2.9	31
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
CALM	.0	.0	.0	.0	.1	.0	.0	.1	1	.0	.0	.1	.0	.0	.6	7
TOT OBS	56	6	54	0	144	1	14	.1	262	0	32	21	0	0	544	861
TOT PCT	6.5	.7	6.3	.0	16.7	.1	1.6	30.4		.0	3.7	2.4	.0	.0	63.4	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG	SNOW	OTHER FRZN PCPN					FOG	SMOKE	DUST	BLWG	SIG WEA	
00003	7.2	.4	7.6	.0	19.5	.0	3.0	35.2	83	.0	5.1	4.2	.0	.0	55.5	236
06009	7.3	.4	5.6	.0	16.8	.0	.9	29.7	69	.0	3.4	2.2	.0	.0	64.7	232
12015	4.4	.5	3.0	.0	12.3	.0	1.0	20.7	42	.0	3.0	.5	.0	.0	75.9	203
18021	7.7	1.5	8.7	.0	18.9	.5	1.5	37.2	73	.0	3.1	2.6	.0	.0	57.1	196
TOT	58	6	54	0	147	1	14	.1	267	0	32	21	0	0	547	867
PCT	6.7	.7	6.2	.0	17.0	.1	1.6	30.8		.0	3.7	2.4	.0	.0	63.1	100.0

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PERIOD: (PRIMARY) 1943-1970  
(OVER-ALL) 1901-1970

AREA 0009 ADAK  
51-55N 172-180W

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)					21
	0-3	4-10	11-21	22-33	34-47	00	03	06	09	12					15	18				
N	.1	2.0	2.4	1.6	.6	.1	89	6.8	19.1		7.6	3.8	6.2	7.0	8.4	10.0	6.6	3.5		
NNE	.2	2.0	2.1	1.5	.3	.1	80	6.1	17.6		6.7	11.5	6.2	5.3	4.7	5.0	7.2	5.2		
NE	.2	2.6	4.1	3.3	.8	.0	131	9.9	18.1		10.5	11.5	7.8	12.3	5.8	15.0	4.8	16.8		
ENE	.0	.6	2.2	1.4	.6	.0	63	4.8	21.3		2.9	3.8	8.3	4.8	6.3	7.5	3.6	3.5		
E	.2	3.2	3.4	2.3	.8	.2	132	10.0	18.1		12.3	7.7	10.9	12.8	5.3	5.0	7.8	10.4		
ESE	.0	.5	1.7	1.3	.2	.0	49	3.7	20.3		4.1	7.7	2.6	3.7	3.7	2.5	1.8	5.8		
SE	.2	2.6	4.4	2.7	1.4	.2	151	11.5	20.0		10.8	.0	8.3	14.4	13.2	10.0	10.8	13.9		
SSE	.0	.9	1.5	1.4	.6	.1	60	4.6	21.8		3.8	3.8	5.7	2.1	6.3	7.5	7.2	2.3		
S	.2	1.6	2.0	1.1	.2	.0	66	5.0	15.9		5.8	3.8	2.6	3.2	8.9	2.5	6.0	3.5		
SSW	.2	.8	1.7	.5	.1	.0	44	3.3	16.2		3.2	11.5	4.7	1.6	3.7	.0	4.8	1.7		
SW	.8	3.0	1.5	.8	.2	.2	85	6.5	13.7		5.0	7.7	6.2	7.0	8.4	7.5	5.4	7.5		
WSW	.3	1.1	1.6	1.3	.2	.2	62	4.7	18.5		5.8	.0	3.6	3.2	3.2	7.5	4.8	6.9		
W	.2	2.3	3.6	2.2	.7	.1	120	9.1	18.3		9.6	11.5	10.4	8.0	7.4	10.0	10.8	7.5		
WNW	.2	1.1	.9	.9	.2	.0	44	3.3	17.8		4.6	3.8	5.7	2.7	3.7	2.5	5.4	.6		
NW	.3	2.1	1.6	.7	.4	.0	66	5.0	14.8		3.2	11.5	5.7	7.0	7.9	.0	4.8	2.9		
NNW	.4	1.2	1.8	.5	.2	.0	55	4.2	15.6		4.1	.0	4.1	3.7	2.1	7.5	7.2	4.0		
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0		.0	.0	.0	.0	.0	.0	.0	.0		
CALM	1.5	363	482	296	99	13	20	1.5	.0		1.8	.0	1.0	1.1	1.1	.0	.6	4.0		
TOT OBS	64	27.6	36.6	22.5	7.5	1.0	1317	100.0	17.8		342	26	193	187	190	40	166	173		
TOT PCT	4.9	27.6	36.6	22.5	7.5	1.0	1317	100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-6	7-16	17-27	28-40	41+				00	03	06	09	12	15	18	21
N	1.3	4.7	4.5	2.0	.4	169	12.8	18.3	14.3	15.4	12.4	12.3	13.2	15.0	13.9	8.7
NE	1.1	5.5	5.4	2.4	.3	194	14.7	19.1	13.5	15.4	16.1	17.1	12.1	22.5	8.4	20.2
E	1.7	4.7	4.4	2.4	.5	181	13.7	18.7	16.4	15.4	13.5	16.6	8.9	7.5	9.6	16.2
SE	1.4	5.2	5.7	2.7	1.0	211	16.0	20.5	14.6	3.8	14.0	16.6	19.5	17.5	18.1	16.2
S	1.2	3.9	2.3	1.0	.0	110	8.4	16.0	9.1	15.4	7.3	4.8	12.6	2.5	10.8	5.2
SW	3.2	3.9	2.2	1.4	.5	147	11.2	15.7	10.8	7.7	8.8	10.2	11.6	15.0	10.2	14.5
W	1.6	4.7	3.6	2.4	.2	164	12.5	18.1	12.3	15.4	16.1	10.7	11.1	12.5	16.3	8.1
NW	1.5	4.9	1.6	1.1	.2	121	9.2	15.2	7.3	11.5	9.8	10.7	10.0	7.5	12.0	6.9
VAR	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.5	493	391	200	40	20	1.5	.0	1.8	.0	1.0	1.1	1.1	.0	.6	4.0
TOT OBS	193	37.4	29.7	15.2	3.0	1317	100.0	17.8	342	26	193	187	190	40	166	173
TOT PCT	14.7	37.4	29.7	15.2	3.0	1317	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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PERIOD: (PRIMARY) 1943-1970  
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AREA 0009 ADAK  
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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	1-3	4-10	11-21	WIND SPEED (KNOTS)			CALM	MEAN	PCT		TOTAL OBS
				22-33	34-47	48+			FREQ		
00003	3.5	27.4	32.3	24.2	9.5	1.4	1.6	18.6	100.0		368
06009	4.5	27.1	37.6	21.3	6.6	1.8	1.1	17.6	100.0		380
12015	1.7	24.3	42.6	22.2	8.3	.0	.9	18.2	100.0		230
18021	2.9	30.4	36.0	22.1	5.9	.3	2.4	16.8	100.0		339
TOT	44	363	482	296	99	13	20	17.8			1317
PCT	3.3	27.6	36.6	22.5	7.5	1.0	1.5		100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION								TOTAL	MEAN
	0-2	3-4	5-7	8-6	OBSCD	8	6	OBSCD		
N	.5	.3	2.7	2.5	36	6.4			36	6.4
NNE	.3	.7	3.2	2.5	40	6.4			40	6.4
NE	.8	.5	2.5	2.9	40	6.1			40	6.1
ENE	.2	.0	.8	4.6	33	7.5			33	7.5
E	1.2	.3	1.7	6.4	57	6.6			57	6.6
ESE	.8	.2	.7	1.0	16	5.3			16	5.3
SE	.5	.7	1.7	6.7	57	7.1			57	7.1
SSE	.2	.0	1.3	5.2	40	7.5			40	7.5
S	.7	.3	1.3	2.9	31	6.4			31	6.4
SSW	.7	1.3	.2	1.5	22	5.0			22	5.0
SW	1.0	.7	1.5	1.9	30	5.3			30	5.3
WSW	1.0	1.2	1.3	1.0	27	4.7			27	4.7
W	.8	4.0	4.2	1.5	63	4.9			63	4.9
WNW	.5	1.5	2.2	1.2	32	5.5			32	5.5
NW	.7	.5	2.9	2.2	37	6.1			37	6.1
NNW	.0	.5	2.7	1.5	28	6.4			28	6.4
VAR	.0	.0	.0	.0	0	.0			0	.0
CALM	.0	.3	.0	.3	4	5.8			4	5.8
TOT OBS	59	78	184	272	593	6.2			593	6.2
TOT PCT	9.9	13.2	31.0	45.9	100.0				100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION												TOTAL
	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8	ANY HGT	
N	1.3	.2	.0	1.3	1.7	.2	.0	.0	.0	.0	1.3	.0	36
NNE	.3	.2	.0	.8	2.7	1.2	.3	.0	.2	.0	1.0	.0	40
NE	.0	.0	.5	1.3	2.0	1.5	.0	.0	.0	.0	1.3	.0	40
ENE	.7	.0	.2	.7	1.7	1.7	.2	.0	.0	.0	.5	.0	33
E	1.2	.2	.5	2.2	2.2	.8	.2	.0	.0	.0	2.2	.0	57
ESE	.0	.0	.0	.5	.7	.2	.0	.0	.0	.0	1.3	.0	16
SE	.5	.2	1.3	1.0	3.5	.7	.3	.2	.3	.0	1.5	.0	57
SSE	1.5	.2	.5	1.0	2.2	.5	.3	.2	.2	.0	.3	.0	40
S	1.0	.2	.2	.8	1.3	.3	.2	.0	.0	.0	1.2	.0	31
SSW	.3	.0	.0	.3	.8	.2	.0	.0	.0	.0	2.0	.0	22
SW	.2	.0	.5	.3	.8	.7	.0	.0	.0	.0	2.5	.0	30
WSW	.3	.2	.0	.2	.5	1.0	.0	.0	.0	.0	2.5	.0	27
W	.2	.0	.2	1.5	1.3	1.0	.0	.0	.0	.0	6.2	.0	63
WNW	.2	.0	.2	.3	2.0	.3	.0	.0	.0	.0	2.2	.0	32
NW	.0	.0	.0	1.2	2.4	.3	.3	.0	.0	.0	1.9	.0	37
NNW	.2	.2	.2	1.0	1.5	.3	.2	.0	.0	.0	1.2	.0	28
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.0	.0	.0	.0	.2	.2	.0	.0	.0	.0	.3	.0	4
TOT OBS	47	.6	25	87	164	66	12	.2	.4	.0	176	.0	593
TOT PCT	7.9	1.0	4.2	14.7	27.7	11.1	2.0	.3	.7	.7	29.7	.0	100.0

PERIOD: (PRIMARY) 1943-1970

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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

AREA 0009 ADAK

51-55N 172-180W

CEILING (FEET)	VSBY (NM)									
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0		
= OR >6500	.8	1.4	1.4	1.4	1.4	1.4	1.4	1.4		
= OR >5000	1.2	1.7	1.7	1.7	1.7	1.7	1.7	1.7		
= OR >3500	2.4	3.4	3.4	3.7	3.7	3.7	3.7	3.7		
= OR >2000	9.1	14.4	14.7	15.1	15.1	15.1	15.1	15.1		
= OR >1000	26.2	39.6	41.3	42.6	42.6	42.6	42.6	42.6		
= OR >600	32.3	51.1	55.8	57.4	57.4	57.4	57.4	57.4		
= OR >300	34.7	54.3	59.4	61.1	61.3	61.6	61.6	61.6		
= OR >150	34.9	54.7	59.9	61.6	61.9	62.3	62.4	62.4		
= OR > 0	35.0	57.5	65.1	67.7	69.4	69.7	70.2	70.2		
TOTAL	207	340	385	400	410	412	415	415		

TOTAL NUMBER OF OBS: 591

PCT FREQ NH <5/8: 29.8

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8	TOTAL
	3.5	4.0	5.9	8.0	8.1	7.8	13.5	11.3	30.9	7.0 628

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PERIOD: (PRIMARY) 1943-1970  
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AREA 0009 ADAK  
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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.4	.0	.0	.1	.0	.0	.1	.1	.0	.0	.2	.0	.2	.0	.0	.0	.0	.0	10	1.2
NO PCP	.0	.0	.0	.0	.1	.0	.1	.1	.1	.1	.1	.0	.0	.0	.0	.0	.0	.0	5	.6
TOTAL	3	0	0	1	1	0	2	1	1	1	3	0	2	0	0	0	0	0	15	1.8
1/2<1	.4	.2	.1	.0	.4	.2	.2	.0	.1	.0	.1	.5	.0	.1	.0	.2	.0	.0	22	2.6
NO PCP	.0	.0	.0	.2	.1	.0	.5	.2	.1	.0	.0	.0	.1	.0	.0	.0	.0	.0	11	1.3
TOTAL	3	2	1	2	4	2	6	2	2	0	1	4	1	1	0	2	0	0	33	3.9
1<2	.0	.2	.0	.5	.5	.2	.9	.4	.1	.1	.2	.1	.5	.0	.0	.0	.0	.0	32	3.8
NO PCP	.2	.1	.2	.0	.3	.0	.2	.0	.0	.0	.1	.0	.0	.0	.1	.0	.0	.0	11	1.3
TOTAL	2	3	2	4	4	2	10	5	1	1	3	1	4	0	1	0	0	0	43	5.1
2<5	.8	.6	.8	.1	1.1	.6	1.3	.7	.5	.4	.5	.5	.4	.1	.2	.0	.0	.0	72	8.5
NO PCP	.4	.2	.5	.1	.4	.0	.9	.4	.2	.0	.1	.2	.6	.0	.4	.2	.0	.0	39	4.6
TOTAL	10	7	11	2	12	5	19	9	6	3	5	6	8	1	5	2	0	0	111	13.1
5<10	.6	.7	.6	.4	1.6	.7	.7	.5	.4	.2	.5	.6	.8	.5	.7	.2	.0	.1	83	9.8
NO PCP	.7	.6	2.2	1.4	2.0	.9	2.7	1.6	1.4	.8	1.3	.8	2.7	1.3	1.3	1.1	.0	.0	195	23.0
TOTAL	11	11	24	15	31	14	29	18	15	9	15	12	30	15	17	11	0	1	278	32.7
10+	.1	.5	.5	.4	.4	.0	.6	.0	.2	.4	.1	.0	.5	.0	.4	.2	.0	.0	35	4.1
NO PCP	2.8	2.9	2.4	2.1	3.3	1.2	3.4	2.0	1.8	1.8	2.0	2.4	4.8	2.1	2.1	1.6	.0	.6	334	39.3
TOTAL	25	29	24	21	31	10	34	17	17	18	18	20	45	18	21	16	0	5	369	43.5
TOTAL PCT	54	52	62	45	83	33	100	52	42	32	45	43	90	35	44	31	0	6	849	100.0
	6.4	6.1	7.3	5.3	9.8	3.9	11.8	6.1	4.9	3.8	5.3	5.1	10.6	4.1	5.2	3.7	.0	.7	100.0	



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PERIOD: (PRIMARY) 1943-1970  
(OVER-ALL) 1901-1970

AREA 0009 ADAK  
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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	1	.1
	4-10	.0	.0	.0	.1	.1	.0	.1	.0	.1	.0	.1	.0	.1	.0	.0	.0	.0	.0	6	.5
	11-21	.2	.0	.0	.0	.0	.0	.1	.1	.0	.1	.0	.0	.1	.0	.0	.0	.0	.0	7	.5
	22+	.1	.0	.0	.0	.0	.0	.0	.0	.0	.1	.2	.0	.0	.0	.0	.0	.0	.0	4	.3
	TOTAL	4	0	0	1	1	0	2	1	1	2	3	1	2	0	0	0	0	0	18	1.4
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	1	.1
	4-10	.1	.1	.1	.0	.2	.0	.2	.1	.1	.1	.0	.2	.2	.0	.2	.2	.0	.0	20	1.6
	11-21	.3	.1	.2	.2	.1	.0	.2	.1	.0	.0	.1	.2	.0	.0	.0	.1	.0	.0	18	1.4
	22+	.0	.0	.0	.2	.1	.3	.2	.0	.1	.1	.0	.1	.1	.1	.1	.1	.0	.0	17	1.3
	TOTAL	5	2	4	5	4	4	6	2	2	2	1	6	3	1	4	5	0	0	56	4.4
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.1	3	.2
	4-10	.2	.1	.5	.2	.2	.0	.2	.1	.1	.0	.1	.1	.5	.0	.2	.0	.0	.0	27	2.1
	11-21	.1	.0	.3	.1	.2	.2	.3	.1	.1	.0	.1	.1	.2	.0	.1	.0	.0	.0	24	1.9
	22+	.2	.2	.2	.2	.2	.0	.5	.3	.1	.0	.2	.0	.0	.0	.1	.0	.0	.0	27	2.1
	TOTAL	6	3	12	6	7	2	13	6	3	1	5	2	9	1	4	0	0	1	81	6.3
2<5	0-3	.0	.0	.0	.0	.1	.0	.1	.0	.0	.0	.1	.1	.0	.1	.0	.0	.0	.1	6	.5
	4-10	.2	.2	.4	.0	.6	.0	.8	.1	.1	.1	.6	.3	.2	.0	.3	.0	.0	.0	50	3.9
	11-21	.2	.1	.9	.1	.3	.2	.7	.2	.5	.1	.1	.3	.2	.0	.2	.2	.0	.0	52	4.1
	22+	.5	.5	.5	.1	.9	.4	.9	.5	.2	.2	.4	.2	.4	.1	.2	.2	.0	.0	77	6.0
	TOTAL	11	10	24	2	24	7	31	10	10	4	15	12	10	2	8	4	0	1	185	14.5
5<10	0-3	.0	.1	.0	.0	.1	.0	.0	.0	.0	.0	.2	.0	.1	.0	.2	.2	.0	.3	13	1.0
	4-10	.1	.2	.8	.1	.7	.4	.5	.4	.3	.2	.7	.2	.7	.2	.4	.2	.0	.0	77	6.0
	11-21	.7	.5	.9	.5	1.0	.5	1.5	.6	.5	.4	.5	.5	.6	.5	.5	.8	.0	.0	135	10.6
	22+	.5	.4	.9	.9	1.2	.5	1.3	.5	.5	.2	.5	.6	1.6	.5	.6	.4	.0	4	141	11.0
	TOTAL	16	14	34	18	38	19	42	19	17	9	23	17	38	16	22	20	0	4	366	28.7
10+	0-3	.1	.1	.2	.0	.0	.0	.1	.0	.1	.2	.3	.2	.1	.0	.1	.2	.0	1.0	32	2.5
	4-10	1.4	1.5	.8	.3	1.5	.2	.9	.3	.9	.5	1.6	.3	.7	.9	1.1	.8	.0	.0	175	13.7
	11-21	.9	1.5	1.7	1.5	1.9	.9	1.7	.5	.8	1.2	.9	.6	2.6	.5	.9	.9	.0	.0	240	18.8
	22+	1.0	.9	1.1	.5	.9	.2	1.3	.7	.5	.2	.0	.8	.9	.5	.1	.2	.0	.0	124	9.7
	TOTAL	43	51	48	30	54	16	51	20	28	26	35	24	55	24	27	26	0	13	571	44.7
	TOTAL	85	80	122	62	128	48	145	58	61	44	82	62	117	44	65	55	0	19	1277	100.0
	PCT	6.7	6.3	9.6	4.9	10.0	3.8	11.4	4.5	4.8	3.4	6.4	4.9	9.2	3.4	5.1	4.3	.0	1.5	100.0	

JANUARY

PERIOD: (PRIMARY) 1943-1970  
(OVER-ALL) 1901-1970

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH > 4/8), AND  
OCCURRENCE OF NH < 5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH < 5/8 ANY HGT	TOTAL OBS
00003	7.7	1.9	4.5	17.4	27.1	14.2	1.9	.0	1.3	.0	76.1	23.9	155
06009	6.5	.0	3.0	16.1	28.0	11.3	2.4	.6	.0	1.8	69.6	30.4	168
12015	7.7	1.4	3.5	9.8	27.3	12.6	.7	.7	.7	.7	65.0	35.0	143
18021	9.3	.7	5.7	13.6	26.4	7.1	2.9	.0	.7	.0	66.4	33.6	140
TOT	47	6	25	87	165	69	12	2	4	4	421	185	606
PCT	7.8	1.0	4.1	14.4	27.2	11.4	2.0	.3	.7	.7	69.5	30.5	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	2.0	2.7	3.4	9.5	23.6	58.8	148
06009	.6	.6	2.4	10.8	28.7	56.9	167
12015	.0	.7	1.4	9.3	28.6	60.0	140
18021	.7	2.9	2.9	5.1	33.1	55.1	136
TOT	5	10	15	52	168	341	591
PCT	.8	1.7	2.5	8.8	28.4	57.7	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET, NH > 4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH < 5/8 AND 5+	TOTAL OBS
00003	7.4	14.2	35.1	43.9	20.9	148
06009	6.6	9.6	31.1	38.9	29.9	167
12015	7.9	12.1	26.4	40.7	32.9	140
18021	10.3	16.9	34.6	34.6	30.9	136
TOT	47	77	188	234	169	591
PCT	8.0	13.0	31.8	39.6	28.6	100.0

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TABLE 13

TEMP F	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP								TOTAL OBS	PCT FREQ
	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100		
45/49	.0	.0	.0	.1	.1	.5	.3	.5	15	1.5
40/44	.0	.0	.2	.5	1.0	2.1	3.5	10.0	172	17.4
35/39	.0	.1	.3	1.3	5.1	6.3	13.1	22.3	478	48.5
30/34	.0	.0	.0	.9	1.1	2.4	11.1	10.5	257	26.1
25/29	.0	.0	.0	.1	.5	.9	1.1	3.3	59	6.0
20/24	.0	.0	.0	.0	.0	.1	.2	.2	5	.5
TOTAL	0	1	5	29	77	122	289	463	986	100.0
PCT	.0	.1	.5	2.9	7.8	12.4	29.3	47.0		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP												
N	NE	E	SE	S	SW	W	NW	VAR	CALM			
.0	.1	.3	.4	.5	.0	.1	.1	.0	.0			
.3	.9	4.7	5.9	2.6	1.4	1.1	.5	.0	.0			
4.6	7.1	7.5	7.9	4.2	6.1	6.4	4.3	.0	.5			
4.5	5.1	1.8	1.2	1.1	3.2	4.0	4.5	.0	.7			
2.5	1.5	.1	.1	.1	.0	.6	.7	.0	.3			
.2	.0	.0	.0	.0	.0	.1	.0	.0	.2			
119	145	142	153	84	106	121	99	0	17			
12.1	14.7	14.4	15.5	8.5	10.8	12.3	10.0	.0	1.7			

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR										
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS	
0003	48	46	43	36	29	26	20	36.4	368	
0609	47	44	42	36	29	27	25	35.9	378	
1215	46	44	42	36	29	23	23	35.9	229	
1821	46	44	42	36	27	21	20	35.2	340	
TOT	48	45	42	36	28	25	20	35.9	1315	

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR										TOTAL OBS
HOUR (GMT)	0-29	30-59	60-69	70-79	80-89	90-100	MEAN			
0003	.0	5.4	9.4	10.4	29.5	45.3	85			278
0609	.0	2.3	9.6	10.6	27.9	49.5	86			301
12015	.0	4.1	7.6	17.9	22.8	47.6	85			145
18021	.0	2.7	4.2	13.3	34.1	45.8	87			264
TOT	0	35	77	122	289	465	86			988

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	21	24	25	28	29	32	33	36	37	40	41	44	45	TOT	W FOG	WD FOG
9/10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.1	2	.0	.3
7/8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	2	.0	.3
6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.1	2	.0	.3
5	.0	.0	.0	.0	.0	.0	.0	.0	.4	.8	.8	.5	.5	13	.1	1.6
4	.0	.0	.0	.0	.0	.0	.1	.4	.5	1.2	1.2	.0	.0	13	.4	1.3
3	.0	.0	.0	.0	.0	.0	.4	.5	1.5	1.6	1.6	.0	.0	19	.5	2.0
2	.0	.0	.0	.0	.0	.0	.4	1.5	2.2	2.2	2.2	.1	.1	31	.4	3.8
1	.0	.0	.0	.0	.0	.0	.3	1.5	1.5	1.3	1.3	.0	.0	23	.3	2.8
0	.0	.0	.0	.0	.1	.1	1.5	7.5	1.2	1.2	1.2	.0	.0	77	.8	9.5
-1	.0	.0	.0	.0	.0	.0	1.2	4.8	.5	.5	.5	.0	.0	49	.0	6.6
-2	.0	.0	.0	.0	.1	.1	4.2	6.7	.5	.5	.5	.0	.0	86	.1	11.4
-3	.0	.0	.0	.0	.3	.3	4.7	3.6	.1	.1	.1	.0	.0	65	.1	8.6
-4	.0	.0	.0	.0	.9	.9	6.7	2.8	.0	.0	.0	.0	.0	78	.3	10.2
-5	.1	.1	.3	.1	1.1	1.7	3.2	1.3	.0	.0	.0	.0	.0	78	.1	10.3
-6	.0	.0	.1	.3	1.4	4.4	4.0	1.6	.3	.3	.3	.0	.0	50	.3	6.5
-7/-8	.1	.1	.3	.4	1.7	3.6	1.6	.3	.0	.0	.0	.0	.0	78	.1	10.3
-9/-10	.0	.0	.4	3.6	1.6	.3	.0	.0	.0	.0	.0	.0	.0	44	.3	5.6
-11/-13	.0	.0	2.0	1.6	.3	.0	.0	.0	.0	.0	.0	.0	.0	29	.0	3.9
-14/-16	.1	.1	.1	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	3	.0	.4
-17/-19	.1	.1	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	2	.0	.3
TOTAL	4	25	105	264	262	75	9	744	29	715	96.1					
PCT	.5	3.4	14.1	35.5	35.2	10.1	1.2	100.0	3.9	96.1						

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N						NE						TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	1-3	4-10	11-21	22-33	34-47	48+			
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
1-2	.0	1.2	.0	.0	.0	.0	.4	.4	.0	.0	.0	.0	3	.0	2
3-4	.0	.4	.0	.0	.0	.0	.0	.8	2.8	.0	.0	.0	1	.0	9
5-6	.0	.4	1.2	.4	.0	.0	.0	.4	.8	.0	.0	.0	5	.0	3
7	.0	.0	.8	.0	.8	.0	.0	.0	2.0	1.6	.0	.0	4	.0	9
8-9	.0	.0	.4	1.2	.0	.0	.0	.0	.0	.4	.0	.0	4	.0	1
10-11	.0	.0	.4	.8	.0	.0	.0	.0	.4	.0	.4	.0	3	.0	2
12	.0	.0	.0	.4	.0	.0	.0	.0	.0	.4	.0	.4	1	.0	2
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1	.0	0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
26-32	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	1	.0	1
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	0	5	7	8	2	1	1	4	15	6	3	0	23	0	29
PCT	.0	2.0	2.8	3.2	.8	.4	.4	1.6	6.0	2.4	1.2	.0	9.1	.0	11.5

HGT	E						SE						TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	1-3	4-10	11-21	22-33	34-47	48+			
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
1-2	.0	.8	.8	.0	.0	.0	.0	.4	.4	.0	.0	.0	4	.0	2
3-4	.0	.0	.0	.0	.0	.0	.0	.4	1.2	.0	.0	.0	2	.0	5
5-6	.0	.0	2.4	.4	.4	.0	.0	2.0	1.6	.4	.0	.0	8	.0	10
7	.0	.8	.8	.8	.0	.0	.0	.4	1.6	.0	.0	.0	6	.0	5
8-9	.0	.0	.4	.4	.0	.0	.0	.0	.0	1.2	.0	.0	2	.0	3
10-11	.0	.0	.4	.0	.0	.0	.0	.0	.4	1.6	.0	.0	1	.0	5
12	.0	.0	.0	.4	.0	.0	.0	.0	.0	.4	.0	.0	1	.0	1
13-16	.0	.0	.0	1.2	.0	.0	.0	.0	.0	.0	.0	.0	3	.0	0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	1
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
26-32	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	1	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	0	4	14	8	1	1	0	8	13	10	1	1	28	1	33
PCT	.0	1.6	5.6	3.2	.4	.4	.0	3.2	5.2	4.0	.4	.4	11.1	.4	13.1

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
1-2	.0	1.2	.4	.0	.0	.0	4	.0	.4	.8	.0	.0	.0	3
3-4	.0	1.6	.8	.0	.0	.0	6	.4	.4	.4	.0	.0	.0	3
5-6	.0	.0	1.6	.4	.4	.0	6	.0	.0	2.0	.4	.0	.0	6
7	.0	.0	2.0	.0	.0	.0	5	.0	.4	.0	.8	.0	.0	3
8-9	.0	.0	.4	.8	.0	.0	3	.0	.4	.0	1.2	.0	.0	4
10-11	.0	.0	.0	.4	.0	.0	1	.0	.4	.0	.4	.4	.0	3
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
13-16	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.8	.0	.0	2
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.4	.0	.0	1
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	1
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.4	1
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.4	1
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	0	7	13	4	1	0	25	1	5	8	10	1	2	27
PCT	.0	2.8	5.2	1.6	.4	.0	9.9	.4	2.0	3.2	4.0	.4	.8	10.7

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	GRAND TOTAL
<1	.0	.0	.0	.0	.0	.0	0	.0	.4	.0	.0	.0	.0	1	1
1-2	.0	.8	.0	.0	.0	.0	2	.0	1.6	.4	.4	.0	.0	5	25
3-4	.0	2.8	1.2	.8	.0	.0	12	.0	1.6	2.0	.4	.0	.0	10	48
5-6	.0	.0	3.2	.0	.0	.0	8	.0	.4	1.2	.4	.0	.0	5	51
7	.0	.0	1.2	1.6	.0	.0	7	.0	.0	1.2	.0	.0	.0	3	42
8-9	.0	.0	.8	1.2	.0	.0	5	.0	.0	.8	.0	.0	.0	2	24
10-11	.0	.0	1.2	1.6	.8	.0	6	.0	.4	.4	.8	.0	.0	4	25
12	.0	.4	.0	.8	.4	.0	7	.0	.0	.0	.4	.0	.0	1	13
13-16	.0	.0	.0	2.0	.0	.0	7	.0	.0	.0	.0	.0	.0	0	13
17-19	.0	.0	.0	.4	.0	.0	1	.0	.0	.0	.0	.0	.0	0	1
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.4	.0	1	4
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	3
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
TOTAL	0	10	21	21	3	0	55	0	11	15	5	1	0	32	252
PCT	.0	4.0	8.3	8.3	1.2	.0	21.8	.0	4.4	6.0	2.0	.4	.0	12.7	100.0

HGT	0-3	4-10	11-21	22-33	34-47	48+	TOTAL OBS
<1	1.2	.4	.0	.0	.0	.0	4
1-2	.4	6.7	2.7	.0	.0	.0	25
3-4	.4	7.8	9.0	1.6	.0	.0	48
5-6	.0	3.1	13.7	2.4	.8	.0	51
7	.0	1.6	9.4	4.7	.8	.0	42
8-9	.0	.4	2.7	6.3	.0	.0	24
10-11	.0	.8	2.7	5.5	.8	.0	25
12	.0	.0	1.2	2.7	1.2	.0	13
13-16	.0	.4	.0	4.3	.4	.0	13
17-19	.0	.0	.0	.4	.0	.0	1
20-22	.0	.0	.0	.4	.0	.4	2
23-25	.0	.0	.0	.0	.8	.8	4
26-32	.0	.0	.0	.0	.4	.8	3
33-40	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0
TOTAL	5	54	106	72	13	5	255
PCT	2.0	21.2	41.6	28.2	5.1	2.0	100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+ TOTAL	MEAN HGT
<6	.0	3.5	9.8	7.0	3.5	1.1	1.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	75
6-7	.0	.0	3.5	7.7	7.4	3.5	2.8	1.1	1.4	.4	.4	1.1	.0	.0	.0	.0	.0	.0	.0	83
8-9	.0	.0	.4	2.5	4.9	3.9	2.5	4.2	3.9	.0	.4	.4	.7	.0	.0	.0	.0	.0	.0	10
10-11	.0	.0	.4	.0	.4	2.1	2.5	2.1	1.4	.4	.4	1.4	.0	.0	.0	.0	.0	.0	.0	31
12-13	.0	.0	.0	.0	.4	.4	.4	.0	.7	.0	.4	.7	.4	.0	.0	.0	.0	.0	.0	9
>13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	2
INDET	5.6	.0	.0	.0	.4	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	18
TOTAL	16	10	40	49	48	32	27	21	22	2	4	11	3	.0	0	0	0	0	0	285
PCT	5.6	3.5	14.0	17.2	16.8	11.2	9.5	7.4	7.7	.7	1.4	3.9	1.1	.0	.0	.0	.0	.0	.0	100.0

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TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FOG WD	SMOKE HAZE	DUST BLWG	NO SNOW	SIG WEA	
N	.4	.1	.0	.0	2.0	.1	.1	2.6	22	.0	.0	.1	.0	.0	4.4	61
NNE	.2	.0	.4	.0	1.4	.0	.0	1.9	16	.0	.0	.0	.0	.0	2.0	33
NE	.1	.0	.6	.0	1.8	.0	.0	2.5	21	.0	.1	.7	.0	.0	3.6	59
ENE	.1	.0	.7	.0	.5	.0	.0	1.3	11	.0	.0	.0	.0	.0	4.1	46
E	.6	.2	.5	.0	1.8	.0	.0	2.9	25	.0	.1	.0	.0	.0	6.3	80
ESE	.8	.0	.5	.0	.8	.0	.0	1.9	16	.0	.2	.0	.0	.0	3.5	50
SE	.8	.1	.5	.0	1.2	.1	.0	2.5	21	.0	.5	.0	.0	.0	3.4	54
SSE	.9	.2	.2	.0	.6	.0	.0	1.8	15	.0	.2	.0	.0	.0	4.1	52
S	.7	.0	.5	.0	.4	.0	.0	1.5	13	.0	.2	.1	.0	.0	4.1	51
SSW	.7	.0	.2	.0	.9	.1	.1	1.9	16	.0	.2	.0	.0	.0	3.2	45
SW	.4	.0	.4	.0	1.3	.0	.0	2.0	17	.0	.4	.0	.0	.0	4.8	61
WSW	.0	.0	.1	.0	1.9	.0	.0	2.0	17	.1	.0	.0	.0	.0	4.8	59
W	.0	.0	.2	.0	1.5	.0	.0	1.8	15	.0	.1	.2	.0	.0	7.5	82
WNW	.0	.0	.1	.0	.6	.0	.0	.7	6	.0	.1	.0	.0	.0	3.7	39
NW	.0	.2	.0	.0	.9	.0	.1	1.2	10	.0	.4	.0	.1	.0	3.5	44
NNW	.0	.0	.0	.1	1.3	.0	.0	1.4	12	.0	.0	.0	.0	.0	2.3	32
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
CALM	.0	.0	.0	.0	.1	.0	.0	.1	1	.0	.2	.0	.0	.0	.7	9
TOT OBS	49	8	41	1	161	3	3	254	254	1	24	12	1	1	565	857
TOT PCT	5.7	.9	4.8	.1	18.8	.4	.4	29.6	29.6	.1	2.8	1.4	.1	.1	65.9	100.0

TABLE 2  
PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FOG WD	SMOKE HAZE	DUST BLWG	NO SNOW	SIG WEA	
00003	5.3	1.3	4.0	.4	22.1	.0	.0	32.7	74	.0	4.0	1.3	.0	.0	61.9	226
06009	4.0	.4	4.8	.0	18.1	.0	.4	26.4	60	.0	3.1	1.8	.4	.0	68.3	227
12015	4.6	.5	4.6	.0	16.6	.9	.9	25.3	55	.5	1.4	.9	.0	.0	71.9	217
18021	9.2	1.5	5.6	.0	17.9	.5	.0	33.7	66	.0	2.6	1.5	.0	.0	62.2	196
TOT	49	8	41	1	162	3	3	255	255	1	24	12	1	1	573	866
PCT	5.7	.9	4.7	.1	18.7	.3	.3	29.4	29.4	.1	2.8	1.4	.1	.1	66.2	100.0



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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						21
	0-3	4-10	11-21	22-33	34-47	00	03	06	09	12					15	18					
N	.3	1.4	2.7	1.8	.1	.0	74	6.2	17.2	4.6	.0	6.3	4.2	8.8	9.1	6.4	7.7				
NNE	.0	1.1	2.1	.8	.1	.1	50	4.2	17.2	4.9	5.4	2.6	6.3	2.9	2.3	4.5	4.2				
NE	.1	1.7	2.7	2.2	.4	.0	84	7.0	18.5	7.4	2.7	9.4	8.4	4.9	.0	3.8	11.3				
ENE	.1	.8	1.2	2.4	.7	.0	62	5.2	22.4	4.9	2.7	4.2	2.8	8.3	4.5	5.1	5.6				
E	.1	1.5	1.8	2.8	1.7	.3	97	8.1	23.7	9.5	2.7	8.9	6.3	8.8	4.5	10.9	4.2				
ESE	.1	.8	1.8	1.7	.4	.2	59	4.9	21.8	4.2	8.1	5.8	4.9	5.4	9.1	4.5	2.8				
SE	.3	2.4	1.8	1.8	.4	.1	81	6.8	17.5	5.7	5.4	8.4	8.4	5.4	2.3	6.4	9.2				
SSE	.0	.9	1.9	1.8	.7	.3	67	5.6	23.4	7.8	10.8	4.2	6.3	3.4	4.5	6.4	3.5				
S	.3	1.8	2.1	1.3	1.3	.2	83	6.9	20.1	9.5	5.4	3.7	7.0	4.9	2.3	7.7	9.9				
SSW	.2	1.7	1.2	.8	1.3	.3	64	5.3	21.9	3.5	2.7	4.7	5.6	7.4	6.8	5.1	7.0				
SW	.5	2.7	3.7	1.8	.8	.2	115	9.6	17.8	8.8	13.5	7.9	14.7	7.4	18.2	6.4	11.3				
WSW	.2	.8	3.3	1.8	.8	.2	84	7.0	20.4	7.1	8.1	6.8	6.3	7.8	9.1	7.1	5.6				
W	.1	1.9	3.1	1.8	.9	.3	98	8.2	20.7	8.5	16.2	11.0	5.6	9.8	4.5	7.7	3.5				
WNW	.1	1.1	1.1	1.2	.8	.1	51	4.3	21.5	2.8	5.4	6.3	2.8	5.9	11.4	4.5	.7				
NW	.1	2.0	2.0	1.3	.3	.1	69	5.8	17.7	6.0	5.4	7.3	7.0	3.4	4.5	5.8	5.6				
NNW	.1	1.0	1.5	.9	.3	.0	46	3.8	18.5	3.2	5.4	2.1	2.8	3.9	6.8	5.8	4.9				
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0				
CALM	1.3	.0	.0	.0	.0	.0	16	1.3	.0	1.4	.0	.5	.7	1.5	.0	1.9	2.8				
TOT OBS	45	284	404	312	129	26	1200	100.0	19.7	283	37	191	143	204	44	156	142				
TOT PCT	3.8	23.7	33.7	26.0	10.8	2.2		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0				

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)								
	0-6	7-16	17-27	28-40	41+				00	03	06	09	12	15	18	21	
N	1.0	3.8	4.5	.9	.1	124	10.3	17.2	9.5	5.4	8.9	10.5	11.8	11.4	10.9	12.0	
NE	1.1	3.7	4.8	2.1	.5	146	12.2	20.1	12.4	5.4	13.6	11.2	13.2	4.5	9.0	16.9	
E	1.6	2.4	4.3	3.8	.9	156	13.0	23.0	13.8	10.8	14.7	11.2	14.2	13.6	15.4	7.0	
SE	1.3	3.7	4.8	1.9	.7	148	12.3	20.2	13.4	16.2	12.6	14.7	8.8	6.8	12.8	12.7	
S	1.7	4.4	2.3	2.8	1.1	147	12.3	20.9	13.1	8.1	8.4	12.6	12.3	9.1	12.8	16.9	
SW	2.3	6.2	4.5	3.0	.7	199	16.6	18.9	15.9	21.6	14.7	21.0	15.2	27.3	13.5	16.9	
W	.9	4.6	3.7	2.3	1.0	149	12.4	21.0	11.3	21.6	17.3	8.4	15.7	15.9	12.2	4.2	
NW	1.3	3.6	2.8	1.8	.2	115	9.6	18.0	9.2	10.8	9.4	9.8	7.4	11.4	11.5	10.6	
VAR	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	1.3					16	1.3	.0	1.4	.0	.5	.7	1.5	.0	1.9	2.8	
TOT OBS	148	388	381	222	61	1200		19.7	283	37	191	143	204	44	156	142	
TOT PCT	12.3	32.3	31.8	18.5	5.1		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

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TABLE 4

HOUR	PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)							PCT FREQ	TOTAL OBS	
	1-3	4-10	11-21	22-33	34-47	48+	CALM			MEAN
0003	2.5	21.3	35.9	24.1	10.9	4.1	1.3	20.4	100.0	320
0609	3.0	24.6	31.1	26.9	12.9	.9	.6	19.9	100.0	334
2815	1.6	19.8	33.5	29.8	12.5	1.6	1.2	21.0	100.0	248
8621	2.3	28.5	34.2	23.8	6.7	2.0	2.3	17.8	100.0	298
TOT	29	284	404	312	129	26	16	19.7		1200
PCT	2.4	23.7	33.7	26.0	10.8	2.2	1.3		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION								MEAN CLOUD COVER
	0-2	3-4	5-7	8	9	10	11	12	
N	.2	.2	2.6	3.6	38	7.1			
NNE	.0	.3	1.2	1.6	18	6.8			
NE	.2	.0	1.4	3.0	26	7.2			
ENE	.7	.3	1.4	3.1	32	6.5			
E	.3	.7	1.9	7.5	60	7.1			
ESE	.5	.2	1.2	4.0	34	6.9			
SE	.3	.5	2.1	3.6	38	6.7			
SSE	.3	.2	1.0	3.3	28	6.8			
S	.7	.5	2.3	2.3	33	5.9			
SSW	.5	.3	1.0	2.6	26	6.6			
SW	1.7	.9	2.6	2.3	43	5.2			
WSW	1.0	1.0	3.0	2.6	44	5.8			
W	1.6	2.4	3.8	2.3	58	5.2			
WNW	.3	.9	3.0	1.4	32	5.9			
NW	.2	1.2	2.8	1.6	33	5.9			
NNW	.5	.3	2.1	1.7	27	6.4			
VAR	.0	.0	.0	.0	0	.0			
CALM	.3	.2	.0	.5	6	4.5			
TOT OBS	55	59	192	270	576	6.3			
TOT PCT	9.5	10.2	33.3	46.9	100.0				

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION														
	000	150	300	600	900	1000	2000	3500	5000	6500	8000+	NH <5/8 ANY HGT	TOTAL OBS	
000	2	0	9	9	2.1	1.4	.5	.0	.0	.0	.0	.7	38	
149	0	0	0	.5	1.4	.7	.0	.0	.0	.0	.0	.5	1P	
	3	0	0	.7	1.7	.7	.3	.0	.0	.0	.0	.7	26	
	2	0	2	.9	1.4	1.2	.3	.2	.0	.0	.0	1.2	32	
	9	0	3	1.0	2.6	1.7	.7	.2	.3	.0	.0	2.6	60	
	3	5	0	.9	1.4	1.6	.2	.0	.0	.0	.0	1.0	34	
	7	0	3	.7	3.3	.5	.0	.0	.0	.0	.0	1.0	38	
	2	0	3	1.2	1.2	1.0	.2	.0	.0	.0	.0	.7	28	
	0	0	.5	1.4	1.2	.2	.3	.0	.0	.0	.0	2.1	33	
	2	0	3	.9	1.6	.3	.0	.0	.0	.0	.0	1.2	26	
	2	2	.2	.3	1.7	.7	.0	.0	.0	.0	.0	3.6	43	
	5	2	3	.7	2.6	.5	.2	.0	.0	.0	.0	2.6	44	
	0	2	.5	1.2	3.1	.3	.0	.0	.0	.0	.0	4.7	58	
	7	2	3	.3	1.6	1.0	.0	.0	.2	.0	.0	1.2	32	
	3	0	.3	.7	1.6	.9	.2	.0	.0	.0	.0	1.7	33	
	0	0	3	.5	1.4	.9	.2	.2	.0	.0	.0	1.2	27	
	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	
	0	2	.0	.0	.2	.0	.0	.0	.0	.0	.0	.7	6	
27	8	29	77	173	77	77	18	4	.0	.0	.0	159	576	
4.7	1.4	5.0	13.4	30.0	13.7	3.1	.7	.3	.0	.0	.0	27.6	100.0	

PERIOD: (PRIMARY) 1943-1970  
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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2.5	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	.2	.3	.3	.3	.3	.3	.3	.3
= OR >5000	.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0
= OR >3500	2.3	3.8	4.0	4.2	4.2	4.2	4.2	4.2
= OR >2000	9.4	15.4	17.3	18.0	18.2	18.2	18.2	18.2
= OR >1000	21.0	38.5	44.2	47.1	48.0	48.0	48.0	48.0
= OR >600	26.3	49.7	56.5	60.3	61.4	61.4	61.4	61.4
= OR >300	27.7	53.2	60.8	65.0	66.2	66.2	66.2	66.2
= OR >150	27.7	53.9	61.9	66.2	67.4	67.4	67.4	67.4
= OR >0	28.1	55.5	64.6	69.3	71.1	71.6	71.9	72.3
TOTAL	162	320	373	400	410	413	415	417

TOTAL NUMBER OF OBS: 577

PCT FREQ NH <5/8: 27.7

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

TOTAL								
0	1	2	3	4	5	6	7	8 OBSCD OBS
4.3	2.6	6.6	9.5	5.1	8.7	12.3	11.4	35.7
								3.8
								624

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.1	.1	.0	.1	.2	.0	.1	.0	.0	.0	.0	.0	.0	.2	.1	.0	.0	.0	9	1.1
ND PCP	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	4	.5
TOTAL	1	1	0	1	2	0	4	0	0	0	0	0	0	2	2	0	0	0	13	1.5
PCP	.4	.1	.1	.4	.5	.0	.1	.0	.0	.4	.4	.1	.0	.0	.1	.1	.0	.0	22	2.6
ND PCP	.0	.0	.2	.0	.0	.2	.1	.1	.1	.0	.1	.0	.1	.0	.0	.0	.0	.0	9	1.1
TOTAL	3	1	3	3	4	2	2	1	1	3	4	1	1	0	1	1	0	0	31	3.6
PCP	.6	.1	.1	.2	.5	.6	.8	.2	.2	.2	.1	.5	.0	.0	.0	.2	.0	.0	38	4.4
ND PCP	.1	.1	.0	.0	.4	.5	.2	.2	.0	.1	.1	.1	.2	.5	.1	.0	.0	.2	25	2.9
TOTAL	6	2	1	2	7	9	9	4	2	3	2	5	2	4	1	2	0	2	63	7.4
PCP	.5	.4	.8	.1	.8	.6	.7	1.1	.5	.5	.5	.4	.1	.0	.1	.4	.0	.1	63	7.4
ND PCP	.1	.2	.6	.2	.6	.2	.1	.2	.7	.4	.4	.1	.6	.5	.5	.5	.0	.0	50	5.9
TOTAL	5	5	12	3	12	7	7	11	10	7	7	4	6	4	5	7	0	1	113	13.2
PCP	.8	.5	1.2	.4	.8	.6	.6	.6	.7	.7	.8	.9	1.2	.5	.5	.6	.0	.0	96	11.2
ND PCP	2.0	1.2	1.4	1.9	2.0	1.6	1.6	2.1	1.3	1.3	.8	1.5	3.5	1.3	1.8	.9	.0	.4	227	26.6
TOTAL	24	14	22	19	24	19	19	23	17	17	14	21	40	15	19	13	0	3	323	37.8
PCP	.2	.5	.2	.0	.1	.1	.1	.0	.1	.1	.2	.1	.4	.0	.4	.1	.0	.0	23	2.7
ND PCP	2.3	.5	2.2	2.0	3.5	1.4	1.4	1.6	2.3	1.6	3.7	3.2	3.4	1.6	1.5	.9	.0	.4	288	33.7
TOTAL	22	8	21	17	31	13	13	14	21	15	34	28	32	14	16	9	0	3	311	36.4
TOTAL	61	31	59	45	80	50	54	53	51	45	61	59	81	39	44	32	0	9	854	100.0
PCT	7.1	3.6	6.9	5.3	9.4	5.9	6.3	6.2	6.0	5.3	7.1	6.9	9.5	4.6	5.2	3.7	.0	1.1	100.0	

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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	4-10	.0	.0	.0	.0	.0	.0	.1	.0	.1	.1	.0	.0	.0	.0	.1	.0	.0	.0	4	.3
	11-21	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2	.2
	22+	.1	.1	.0	.1	.2	.0	.3	.0	.0	.0	.0	.1	.0	.1	.1	.0	.0	.0	11	.9
	TOTAL	2	1	0	1	2	0	4	0	1	1	0	1	0	2	2	0	0	0	17	1.4
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1	.1
	4-10	.0	.0	.0	.0	.1	.0	.1	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	3	.3
	11-21	.3	.2	.1	.0	.1	.0	.1	.1	.0	.0	.2	.1	.0	.0	.0	.0	.0	.0	14	1.2
	22+	.0	.0	.2	.3	.3	.2	.1	.1	.1	.2	.4	.0	.1	.0	.1	.1	.0	.0	24	2.0
	TOTAL	4	2	3	3	6	2	4	2	2	3	7	1	1	0	1	1	0	0	42	3.6
1<2	0-3	.0	.0	.0	.1	.0	.1	.2	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.2	7	.6
	4-10	.1	.3	.0	.0	.1	.1	.6	.2	.2	.0	.1	.0	.0	.3	.3	.0	.0	.0	24	2.0
	11-21	.2	.1	.0	.0	.0	.2	.2	.2	.0	.0	.1	.1	.1	.0	.0	.1	.0	.0	13	1.1
	22+	.3	.1	.1	.3	.6	.7	.5	.2	.3	.3	.2	.3	.2	.3	.0	.1	.0	.0	49	4.2
	TOTAL	6	5	1	4	8	12	17	6	5	4	4	5	3	6	3	2	0	2	93	7.9
2<5	0-3	.0	.0	.1	.0	.0	.0	.0	.0	.0	.1	.1	.0	.0	.1	.0	.0	.0	.2	6	.5
	4-10	.2	.2	.3	.2	.2	.1	.3	.3	.6	.2	.2	.3	.3	.0	.4	.0	.0	.0	42	3.6
	11-21	.1	.2	.3	.3	.1	.3	.2	.2	.0	.0	.0	.0	.0	.0	.2	.3	.0	.0	41	3.5
	22+	.3	.3	.6	.5	.9	.3	.3	.5	.4	.4	.3	.5	.3	.4	.5	.3	.0	.0	82	7.0
	TOTAL	7	8	16	11	13	8	8	11	15	8	19	10	9	6	13	7	0	2	171	14.6
5<10	0-3	.0	.0	.0	.0	.1	.0	.1	.0	.1	.0	.3	.0	.1	.0	.1	.1	.0	.3	13	1.1
	4-10	.3	.2	.7	.4	.3	.3	.9	.3	.5	.7	.4	.0	.7	.3	.3	.3	.0	.0	78	6.6
	11-21	1.1	.7	1.1	.4	.6	.5	.9	.9	.7	.7	1.0	1.4	1.3	.4	1.0	.6	.0	.0	155	13.2
	22+	.7	.3	1.1	1.1	1.4	.9	.7	1.3	1.3	.9	.9	1.2	1.7	.6	.8	.7	.0	.0	180	15.3
	TOTAL	25	14	34	23	28	20	29	28	30	26	31	30	44	15	26	20	0	3	426	36.3
10+	0-3	.3	.0	.0	.0	.0	.0	.0	.0	.3	.1	.1	.1	.0	.0	.0	.0	.0	.7	17	1.4
	4-10	.8	.5	.7	.3	.9	.3	.6	.3	.9	.8	1.2	.7	1.1	.6	.9	.7	.0	.0	129	11.0
	11-21	.6	.9	1.2	.5	1.1	.9	.5	.7	.8	.3	2.1	1.4	1.4	.6	.8	.5	.0	.0	168	14.3
	22+	.5	.1	.6	.9	1.4	.3	.4	.7	.7	.5	.9	.7	.7	.7	.3	.2	.0	.0	110	9.4
	TOTAL	25	17	29	19	40	17	18	19	30	20	50	34	38	22	22	16	0	8	424	36.1
TOTAL		69	47	83	61	97	59	80	66	83	62	111	81	95	51	67	46	0	15	1173	100.0
PCT		5.9	4.0	7.1	5.2	8.3	5.0	6.8	5.6	7.1	5.3	9.5	6.9	8.1	4.3	5.7	3.9	.0	1.3	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8), AND  
OCCUPANCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL DBS
00003	4.7	1.4	5.4	15.5	30.4	12.8	3.4	.0	74.3
06009	5.5	.6	6.1	12.2	33.5	12.8	4.3	.0	75.6
12015	3.8	1.9	3.2	10.3	28.8	15.4	1.9	1.9	67.3
18021	3.9	1.6	4.7	14.2	22.0	14.2	2.4	.8	63.8
TOT	27	8	29	77	173	82	18	4	420
PCT	4.5	1.3	4.9	12.9	29.1	13.8	3.0	.7	70.6

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL DBS
00003	2.0	1.4	7.5	8.8	31.3	49.0	147
06009	.6	1.9	4.4	8.8	40.0	44.4	160
12015	.7	2.7	5.4	10.7	35.6	45.0	149
18021	1.7	1.7	4.1	10.7	30.6	51.2	121
TOT	7	11	31	56	200	272	577
PCT	1.2	1.9	5.4	9.7	34.7	47.1	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET, NH >4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	1000+ <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL DBS
00003	4.8	12.9	40.1	36.1	23.8	147
06009	5.6	12.5	33.8	43.1	23.1	160
12015	4.0	10.7	31.5	39.6	28.9	149
18021	4.1	12.4	35.5	33.9	30.6	121
TOT	27	70	203	222	152	577
PCT	4.7	12.1	35.2	38.5	26.3	100.0

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TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP												
TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ	TOTAL	
45/49	.0	.0	.0	.0	.0	.1	.4	.4	7	.9	7	13.5
40/44	.0	.0	.0	.2	.4	1.6	4.5	6.8	110	13.5	110	54.4
35/39	.0	.0	.1	.2	2.3	7.6	18.7	25.4	443	24.8	443	24.8
30/34	.0	.0	.0	.1	1.5	4.2	8.0	11.1	202	5.3	202	1.1
25/29	.0	.0	.0	.0	.2	.9	.9	3.3	43	1.1	43	1.1
20/24	.0	.0	.0	.0	.0	.0	.1	1.0	9	1.1	9	1.1
TOTAL	0	0	1	5	36	117	265	390	814	100.0	814	100.0
PCT	.0	.0	.1	.6	4.4	14.4	32.6	47.9				

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP												
TEMP F	N	NE	E	SE	S	SW	W	NW	VAR	CALM	TOTAL	
45/49	.0	.1	.2	.1	.1	.1	.1	.0	.0	.0	.0	.0
40/44	.2	1.0	1.7	2.3	4.1	2.3	.5	.9	.0	.5	.0	.5
35/39	3.3	5.2	7.0	9.6	7.2	10.9	7.2	3.2	.0	.7	.0	.7
30/34	4.2	2.3	2.8	1.8	2.5	4.4	3.7	2.8	.0	.2	.0	.2
25/29	1.1	1.0	.0	.1	.0	.0	1.1	2.0	.0	.0	.0	.0
20/24	.1	.1	.0	.0	.0	.0	.0	.9	.0	.0	.0	.0
TOTAL	73	79	96	114	113	145	103	79	0	12	0	12
PCT	9.0	9.7	11.8	14.0	13.9	17.8	12.7	9.7	.0	1.5	.0	1.5

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR										
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS	
00003	47	45	42	36	28	21	20	35.9	321	
06009	47	44	41	36	28	21	21	35.4	333	
12015	45	43	40	35	27	23	21	34.5	245	
18021	44	42	40	36	27	21	20	34.9	300	
TOT	47	44	41	36	27	22	20	35.2	1199	

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR										
HOUR (GMT)	0-29	30-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS		
00003	.0	1.4	6.8	16.4	27.9	47.5	86	219	.0	.5
06009	.0	.8	2.8	15.4	34.4	46.5	87	247	.0	.7
12015	.0	.7	3.7	15.6	34.8	45.2	87	135	.0	.2
18021	.0	.0	4.1	10.9	34.1	50.9	88	220	.0	.0
TOT	0	6	36	119	268	392	87	821	.0	1.5

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	17	21	25	29	33	37	41	45	TOT	W	WD
	20	24	28	32	36	40	44	48		FOG	FOG
9/10	.0	.0	.0	.0	.0	.0	.4	.0	3	.4	.0
7/8	.0	.0	.0	.0	.0	.0	.1	.0	1	.0	.1
6	.0	.0	.0	.0	.0	.0	.1	.0	1	.1	.0
5	.0	.0	.0	.0	.0	.6	.7	.0	9	.3	1.0
4	.0	.0	.0	.0	.0	.8	.8	.0	12	.3	1.4
3	.0	.0	.0	.0	.0	.0	.3	.0	5	.0	.7
2	.0	.0	.0	.0	.4	2.3	1.0	.0	27	.0	3.7
1	.0	.0	.0	.0	.3	4.4	.7	.1	40	.4	5.1
0	.0	.0	.0	.0	2.8	9.0	.1	.0	86	.3	11.6
-1	.0	.0	.0	.0	3.9	5.4	.0	.0	67	.1	9.1
-2	.0	.0	.0	.1	6.5	6.2	.0	.0	93	.4	12.4
-3	.0	.0	.0	.6	5.5	1.9	.0	.0	58	.1	7.9
-4	.0	.0	.0	1.1	6.4	1.7	.0	.0	66	.1	9.0
-5	.0	.0	.4	1.0	5.7	1.1	.0	.0	59	.0	8.1
-6	.0	.0	.1	1.8	2.2	.7	.0	.0	35	.0	4.8
-7/-8	.0	.0	.3	5.1	2.8	.8	.0	.0	64	.0	8.8
-9/-10	.0	.0	2.2	2.3	.8	.0	.0	.0	39	.0	5.4
-11/-13	.0	.1	2.9	1.1	.1	.0	.0	.0	31	.0	4.3
-14/-16	.0	1.2	1.5	.0	.0	.0	.0	.0	20	.0	2.8
-17/-19	.3	.4	.0	.1	.0	.0	.0	.0	6	.0	.8
-20/-22	.0	.0	.3	.0	.0	.0	.0	.0	2	.0	.3
TOTAL	2	13	56	96	270	255	31	1	724	19	705
PCT	.3	1.8	7.7	13.3	37.3	35.2	4.3	.1	100.0	2.6	97.4



PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N										NE										TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	48+	TOTAL
<1	.4	.0	.0	.0	.0	.0	1	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
1-2	.0	.4	.4	.0	.0	.0	2	.0	.0	.4	.0	.0	.0	1	.0	.0	.4	.0	.0	.0	.0	.0	1
3-4	.0	.0	.9	.0	.0	.0	2	.0	.0	1.3	.4	.0	.0	4	.0	.0	.4	.0	.0	.0	.0	.0	4
5-6	.0	.0	.4	.9	.0	.0	3	.0	.9	.4	.9	.0	.0	5	.0	.0	.4	.0	.0	.0	.0	.0	5
7	.0	.4	1.3	.0	.0	.0	4	.0	.0	.4	1.3	.0	.0	4	.0	.0	.4	.0	.0	.0	.0	.0	4
8-9	.0	.0	.9	.0	.0	.0	2	.0	.0	.4	.4	.4	.0	3	.0	.0	.4	.4	.4	.0	.0	.0	3
10-11	.0	.0	.4	.0	.0	.0	1	.0	.4	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
12	.0	.0	.0	.0	.4	.0	1	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
13-16	.0	.0	.0	1.3	.0	.0	3	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.9	.0	.0	.0	2
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	1	2	10	5	1	0	19	0	3	7	8	4	0	22	0	3	7	8	4	0	0	0	22
PCT	.4	.9	4.4	2.2	.4	.0	8.3	.0	1.3	3.1	3.5	1.8	.0	9.6	.0	1.3	3.1	3.5	1.8	.0	.0	.0	9.6

HGT	E										SE										TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	48+	TOTAL
<1	.0	.5	.0	.0	.0	.0	2	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
1-2	.0	.9	1.8	.0	.0	.0	2	.0	.0	.4	.0	.0	.0	1	.0	.0	.4	.0	.0	.0	.0	.0	1
3-4	.0	.0	.0	.4	.0	.0	5	.0	.4	.0	.4	.0	.0	2	.0	.0	.0	.4	.0	.0	.0	.0	2
5-6	.0	.0	.4	1.8	.0	.0	5	.0	.0	1.3	.4	.0	.0	4	.0	.0	1.3	.4	.0	.0	.0	.0	4
7	.0	.0	.9	1.3	.9	.0	7	.0	.0	2.2	.4	.0	.0	6	.0	.0	1.3	.4	.0	.0	.0	.0	6
8-9	.0	.0	.9	.9	.4	.0	5	.0	.4	.9	.9	.0	.0	6	.0	.0	.9	.9	.0	.0	.0	.0	6
10-11	.0	.0	.0	.4	.0	.0	1	.0	.0	.0	.4	.9	.0	1	.0	.0	.4	.9	.0	.0	.0	.0	1
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.4	.0	.0	.0	0	.0	.0	.4	.0	.0	.0	.0	.0	0
13-16	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
17-19	.0	.0	.0	.9	.0	.0	1	.0	.0	.0	.4	.0	.0	3	.0	.0	.0	.0	.0	.0	.0	.0	3
20-22	.0	.0	.0	.4	.0	.0	1	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	0	4	3.9	6.1	1.3	.4	13.6	0	2	5.7	3.9	.0	1.3	27	0	2	13	9	.0	3	.0	0	27
PCT	.0	1.8	3.9	6.1	1.3	.4	13.6	.0	.9	5.7	3.9	.0	1.3	11.8	.0	.9	5.7	3.9	.0	1.3	.0	.0	11.8

PERIOD: (PRIMARY)		FEBRUARY										AREA 0009		ADAK	
(OVER-ALL) 1963-1970		TABLE 18										51-55N		172-18CW	
PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)															
HGT		S										SW			
		1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1		.0	.0	.0	.0	.0	.0	0	.0	.4	.0	.0	.0	.0	1
1-2		.0	.4	.0	.0	.0	.0	1	.0	1.3	.0	.0	.0	.0	3
3-4		.0	.0	1.8	1.3	.0	.0	7	.0	.9	.9	.4	.0	.0	5
5-6		.0	.4	1.8	.9	.0	.0	7	.0	.0	1.8	.0	.0	.0	4
7		.0	.0	.9	.4	.4	.0	4	.0	.0	3.9	.4	.0	.0	10
8-9		.0	.0	.0	.4	1.8	.0	6	.0	.0	2.2	.9	.0	.0	7
10-11		.0	.0	.0	.0	.0	.0	0	.0	.0	1.3	.0	.0	.0	3
12		.0	.0	.0	.4	.4	.0	2	.0	.0	.0	.0	.0	.0	0
13-16		.0	.0	.4	.9	.4	.0	4	.0	.0	.0	.0	.0	.0	0
17-19		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
20-22		.0	.0	.0	.0	.4	.0	1	.0	.0	.0	.0	.0	.0	0
23-25		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL		0	2	11	10	8	1	32	0	6	23	4	0	0	33
PCT		.0	.9	4.8	4.4	3.5	.4	14.0	.0	2.6	10.1	1.8	.0	.0	14.5

HGT		W										NW				GRAND TOTAL
		1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	
<1		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	4
1-2		.0	.4	.4	.0	.0	.0	2	.0	1.8	.4	.0	.0	.0	5	17
3-4		.0	.9	.9	.0	.0	.0	4	.0	.4	.0	.0	.0	.0	1	30
5-6		.0	.9	.4	.9	.0	.0	5	.0	.0	.0	.9	.0	.0	2	35
7		.0	.4	1.3	.4	.0	.0	5	.0	.0	1.3	2.6	.0	.0	9	49
8-9		.0	.0	.9	1.3	.4	.0	6	.0	.0	.4	1.3	.0	.0	3	38
10-11		.0	.0	.4	.0	.4	.0	2	.0	.0	.9	.0	.0	.0	5	16
12		.0	.0	.4	1.3	1.8	.0	5	.0	.0	.9	.4	.4	.0	4	11
13-16		.0	.0	.0	.4	.0	.0	1	.0	.0	.0	.0	.0	.0	0	20
17-19		.0	.0	.0	.4	.0	.0	1	.0	.0	.0	.0	.0	.0	0	5
20-22		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	3
23-25		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
26-32		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
33-40		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
41-48		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
49-60		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
61-70		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
71-86		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
87+		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
TOTAL		0	6	11	11	7	0	35	0	5	9	14	1	0	29	228
PCT		.0	2.6	4.8	4.8	3.1	.0	15.4	.0	2.2	3.9	6.1	.4	.0	12.7	100.0

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1970

FEBRUARY

AREA 0009 ADAK  
51-55N 172-180W

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL D'
	0-3	4-10	11-21	22-33	34-47	48+					
<1	1.3	1.3	.0	.0	.0	.0					0
1-2	.0	5.2	2.2	.0	.0	.0					17
3-4	.0	2.6	7.4	3.0	.0	.0					30
5-6	.0	2.2	6.5	6.5	.0	.0					35
7	.0	.9	12.2	7.0	1.3	.0					49
8-9	.0	.4	7.0	5.7	3.0	.4					38
10-11	.0	.4	3.0	2.6	.9	.0					16
12	.0	.0	.9	2.6	1.3	.0					11
13-16	.0	.0	1.3	3.5	2.6	1.3					20
17-19	.0	.0	.0	1.3	.9	.0					5
20-22	.0	.0	.0	.4	.4	.4					3
23-25	.0	.0	.0	.0	.0	.0					0
26-32	.0	.0	.0	.0	.0	.0					0
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	3	30	93	75	24	5					230
PCT	1.3	13.0	40.4	32.6	10.4	2.2					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.3	3.8	7.0	4.9	3.1	2.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	61	4
6-7	.0	.0	2.1	2.4	5.2	2.1	1.7	1.0	4.2	.3	.7	.0	.0	.0	.0	.0	.0	.0	.0	57	9
8-9	.0	.3	.0	2.1	2.8	6.3	2.8	3.5	1.4	2.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	61	9
10-11	.0	.0	.0	.7	2.1	5.9	3.1	.3	1.3	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	40	9
12-13	.0	.0	.0	.0	.3	2.8	1.4	2.1	2.8	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	28	11
>13	.0	.0	.0	.0	.0	.0	.0	.3	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2	12
INDET	11.2	.3	.3	.3	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	37	0
TOTAL	33	13	27	30	39	55	26	23	28	9	3	0	0	0	0	0	0	0	0	286	7
PCT	11.5	4.5	9.4	10.5	13.6	19.2	9.1	8.0	9.8	3.1	1.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

MARCH

PERIOD: (PRIMARY) 1943-1970  
(OVER-ALL) 1901-1970

AREA 0009 ADAK  
51-55N 172-180W

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG	SNOW	OTHER					FG	SMOKE	DUST	NO SIG	WEA	
N	.2		.1	.2	2.3	.0	.1	2.8	26	.0	.1	.0	.0	6.1		84
NNE	.6		.5	.0	1.3	.0	.0	1.9	18	.0	.0	.0	.0	1.9		36
NE	.4		.2	.0	4.6	.0	.3	2.5	23	.0	.1	.1	.0	3.6		58
ENE	1.0		.1	.0	.9	.0	.0	1.9	18	.0	.1	.0	.0	2.8		45
E	.5		.4	.0	2.0	.0	.0	3.0	28	.0	.4	.1	.0	4.2		72
ESE	.4		.4	.0	.8	.0	.0	1.6	15	.0	.9	.0	.0	3.0		51
SE	1.4		.3	.0	.2	.0	.1	2.3	21	.0	.3	.0	.2	2.9		53
SSE	.9		.8	.0	.4	.0	.0	1.9	18	.0	.5	.1	.0	2.4		47
S	1.2		1.0	.0	.5	.0	.1	3.0	28	.0	.4	.0	.0	5.0		78
SSW	.4		.3	.0	.1	.0	.0	.9	8	.0	.3	.0	.0	3.7		45
SW	.6		.4	.0	1.0	.0	.1	2.0	21	.0	.3	.0	.0	3.7		58
WSW	.2		.1	.0	.9	.0	.0	1.2	11	.0	.1	.0	.0	6.0		68
W	.2		.1	.0	2.3	.0	.0	2.6	24	.0	.1	.0	.0	6.6		86
WNW	.3		.0	.0	.8	.0	.0	1.0	9	.1	.0	.0	.0	3.3		41
NW	.1		.0	.0	1.0	.0	.1	1.1	10	.0	.1	.0	.0	3.6		44
NNW	.0		.1	.0	1.5	.0	.0	1.6	15	.0	.0	.0	.0	4.1		53
VAR	.0		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0		0
CALM	.0		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.9		8
TOT OBS	80	14	47	2	162	0	8	.0	293	1	36	4	2	591	2	927
TOT PCT	8.6	1.5	5.1	.2	17.5	.0	.9	31.6		.1	3.9	.4	.2	53.8		100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG	SNOW	OTHER					FG	SMOKE	DUST	NO SIG	WEA	
00003	10.0	2.3	4.6	.4	18.5	.0	1.2	32.4	84	.0	6.2	.8	.0	60.6		259
06009	5.2	.9	5.7	.0	21.8	.0	.4	33.2	76	.4	3.5	.4	.4	62.0		229
12015	7.9	.8	6.2	.4	10.7	.0	1.2	26.4	64	.0	2.5	.4	.4	70.2		242
18021	10.6	1.9	3.2	.0	18.5	.0	.5	32.9	71	.0	3.7	.0	.0	63.4		216
TOT	80	14	47	2	164	0	8		295	1	38	4	2	606	2	946
PCT	8.5	1.5	5.0	.2	17.3	.0	.8	31.2		.1	4.0	.4	.2	54.1		100.0

MARCH

PERIOD: (PRIMARY) 1943-1970  
(OVER-ALL) 1901-1970

AREA 0009 ADAK  
51-55N 172-180W

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-3	4-10	11-21	22-33	34-47	48+	TOTAL OBS	PCT FREQ	MEAN SPD	00	03	06	09	12	15
N	.5	1.2	3.2	2.1	.7	.2	109	7.8	20.2	5.9	6.1	11.9	6.7	8.4	8.4
NNE	.2	1.7	1.4	.9	.4	.0	62	4.5	16.3	4.6	24.2	3.8	3.9	3.3	3.6
NE	.3	3.1	2.5	1.4	.5	.0	108	7.8	15.5	8.6	18.2	6.5	14.5	7.0	3.6
ENE	.1	1.9	1.4	.8	.6	.0	69	5.0	16.5	5.1	3.0	3.8	4.5	3.7	.0
E	.1	2.5	2.9	2.3	.6	.1	118	8.5	18.4	8.9	3.0	10.8	8.9	8.9	3.6
ESE	.0	.9	1.7	1.3	.4	.0	60	4.3	19.8	5.4	.0	7.6	2.2	4.7	1.6
SE	.4	1.9	2.2	1.4	.2	.1	85	6.1	16.3	6.5	6.1	4.9	6.7	4.7	3.6
SSE	.1	1.4	1.9	.6	.6	.1	66	4.7	18.2	4.3	3.0	5.4	3.4	4.2	12.5
S	.1	1.8	3.1	2.0	.6	.1	106	7.6	19.2	6.7	3.0	6.5	6.1	7.5	10.7
SSW	.0	1.4	2.7	1.2	.4	.1	79	5.7	18.0	6.2	.0	3.2	7.8	6.5	14.3
SW	.2	1.3	2.9	1.6	.8	.0	95	6.8	19.0	6.7	6.1	5.4	4.5	7.9	5.4
WSW	.1	1.3	2.7	2.4	.9	.0	102	7.3	20.4	6.7	6.1	6.5	7.8	7.9	12.5
W	.3	1.9	4.0	1.7	.8	.3	124	8.9	19.1	9.4	9.1	8.1	6.7	9.3	12.5
WNW	.1	.7	1.9	.8	.1	.1	51	3.7	17.0	4.0	3.0	1.6	3.4	4.7	1.8
NW	.1	1.4	1.9	1.0	.5	.0	68	4.9	18.0	4.8	.0	7.0	6.1	5.1	1.8
NNW	.4	1.1	2.4	1.0	.1	.1	71	5.1	16.6	4.8	9.1	4.9	5.6	5.1	5.4
VAR	.0	.0	.0	.0	.0	.0	17	1.2	.0	.0	.0	.0	.0	.0	.0
CALM	1.2	354	538	309	113	15	1390	100.0	18.0	1.3	.0	2.2	1.1	.9	.0
TOT OBS	61	25.5	38.7	22.2	8.1	1.1	1390			372	33	185	179	214	56
TOT PCT	4.4	16.6	14.9	9.3	3.2	.8	100.0			100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD	00	03	06	09	12	15	18
N	1.7	4.5	3.7	1.7	.6	171	12.3	18.8	10.5	30.3	15.7	10.6	11.7	12.5	14.3
NE	3.1	5.0	2.2	2.3	.2	177	12.7	15.9	13.7	21.2	10.3	19.0	10.7	3.6	11.2
E	1.8	4.1	4.2	2.5	.2	178	12.8	18.9	14.2	3.0	18.4	11.2	13.6	3.6	11.8
SE	2.0	4.0	3.0	1.4	.4	151	10.9	17.2	10.8	9.1	10.3	10.1	8.9	16.1	9.3
S	1.6	4.2	5.5	1.5	.6	185	13.3	18.7	12.9	3.0	9.7	14.0	14.0	25.0	14.0
SW	1.0	5.4	4.6	2.8	.4	197	14.2	19.7	13.4	12.1	11.9	12.3	15.9	17.9	14.3
W	1.0	5.2	4.5	1.4	.5	175	12.6	18.5	13.4	12.1	9.7	10.1	14.0	14.3	11.8
NW	1.6	3.4	3.2	1.6	.2	139	10.0	17.3	9.7	9.1	11.9	11.7	10.3	7.1	11.8
VAR	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.2	495	430	212	44	17	1.2	18.0	1.3	.0	2.2	1.1	.9	.0	.6
TOT OBS	209	35.6	30.9	15.3	3.2	1390			372	33	185	179	214	56	161
TOT PCT	15.0	26.8	22.2	10.3	2.4	100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0

MARCH

PERIOD: (PRIMARY) 1943-1970  
(OVER-ALL) 1901-1970

AREA OOG3 ADAK  
51-55N 172-160W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	WIND SPEED (KNOTS)										PCT		TOTAL OBS
	1-3	4-10	11-21	22-33	34-47	48+	CALM	MEAN	FREQ	OBS			
00003	3.0	26.4	38.0	22.2	7.2	2.0	1.2	18.0	100.0	405			
06009	3.3	25.5	38.5	23.4	6.9	.8	1.6	17.5	100.0	364			
12015	.7	21.5	38.9	25.6	11.5	1.1	.7	20.1	100.0	270			
18021	5.1	27.4	39.6	18.5	8.0	.3	1.1	16.7	100.0	351			
TOT	4	354	538	309	113	15	17	18.0		1390			
PCT	3.2	25.5	38.7	22.2	8.1	1.1	1.2		100.0				

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

BY WIND DIRECTION

WIND DIR	PCT FREQ								TOTAL OBS	MEAN CLOUD COVER
	0-2	3-4	5-7	8	9	10	11	12		
N	.2	.3	3.1	4.9	50	7.1				
NNE	.5	.3	1.2	1.7	22	6.1				
NE	.2	.0	1.5	4.4	36	7.4				
ENE	.2	.2	.7	3.6	27	7.4				
E	.2	.2	1.7	7.5	56	7.5				
ESE	.0	.2	1.2	3.8	30	7.5				
SE	.0	.2	1.2	2.9	25	7.4				
SSE	.2	.0	.9	3.2	25	7.4				
S	.2	.3	2.2	5.1	46	7.2				
SSW	.2	.9	1.5	2.9	32	6.6				
SW	.3	1.0	.9	3.4	33	6.5				
WSW	1.2	1.5	2.0	1.7	38	5.1				
W	1.4	1.5	4.8	2.4	59	5.5				
WNW	.3	.9	2.6	.7	26	5.5				
NW	.3	1.0	1.7	2.6	33	6.3				
NNW	.0	1.0	3.9	1.9	40	6.3				
VAR	.0	.0	.0	.0	0	.0				
CALM	.3	.3	.3	.3	8	4.6				
TOT OBS	33	58	184	311	586	6.6				
TOT PCT	5.6	9.9	31.4	53.1	100.0					

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	PERCENTAGE FREQUENCY OF NH <5/8										ANY HGT		TOTAL OBS			
	0-2	3-4	5-7	8-6	TOTAL OBS	CLOUD COVER	000 149	150 299	300 599	600 999	1000 1999	2000 3499		3500 4999	5000 6499	6500 7999
N	.2	.3	3.1	4.9	50	7.1	.9	.2	.7	.9	2.0	2.6	.7	.0	.0	.0
NNE	.5	.3	1.2	1.7	22	6.1	.0	.0	.0	.7	1.2	.9	.2	.0	.0	.0
NE	.2	.0	1.5	4.4	36	7.4	.5	.2	.0	1.0	2.0	1.0	.3	.0	.0	.0
ENE	.2	.2	.7	3.6	27	7.4	.5	.0	.2	.9	1.7	.7	.0	.0	.0	.2
E	.2	.2	1.7	7.5	56	7.5	2.6	.0	.2	.9	4.3	1.0	.0	.0	.2	.0
ESE	.0	.2	1.2	3.8	30	7.5	.9	.0	.3	.7	1.9	.7	.2	.0	.0	.0
SE	.0	.2	1.2	2.9	25	7.4	1.0	.0	.3	1.0	.2	1.0	.3	.0	.0	.2
SSE	.2	.3	.9	3.2	25	7.2	.2	.2	.3	.3	1.9	.3	.3	.0	.0	.0
S	.2	.3	2.2	5.1	46	7.2	.9	.0	.9	1.4	1.7	1.2	.5	.0	.0	.2
SSW	.2	.9	1.3	2.9	32	6.6	.2	.2	.2	.9	1.9	.7	.0	.0	.0	.0
SW	.3	1.0	.9	3.4	33	6.5	.9	.3	.3	.9	.7	.2	.2	.0	.0	.3
WSW	1.2	1.5	2.0	1.7	38	5.1	.2	.0	.5	1.0	.7	.7	.3	.0	.0	.0
W	1.4	1.5	4.8	2.4	59	5.5	.2	.0	.3	1.5	2.6	1.4	.5	.0	.0	.0
WNW	.3	.9	2.6	.7	26	5.5	.0	.0	.0	.9	1.7	.5	.0	.0	.0	.0
NW	.3	1.0	1.7	2.6	33	6.3	.3	.2	.0	1.2	1.2	.5	.3	.0	.0	.0
NNW	.0	1.0	3.9	1.9	40	6.3	.0	.0	.0	.7	2.2	1.7	.0	.0	.2	.0
VAR	.0	.0	.0	.0	0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.3	.3	.3	.3	8	4.6	.0	.0	.0	.2	.2	.2	.2	.0	.0	.0
TOT OBS	33	58	184	311	586	6.6	53	7	25	87	164	89	24	3	2	4
TOT PCT	5.6	9.9	31.4	53.1	100.0		9.0	1.2	4.3	14.8	28.0	15.2	4.1	.5	.3	.7

PERIOD: (PRIMARY) 1943-1970 (OVER-ALL) 1901-1970		MARCH		AREA 0009 51-55N 172-180W		
TABLE 7						
CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)						
CEILING (FEET)	= OR >10	= OR >5	= OR >2	VSBY (NM)		
				= OR >1	= OR >1/2	= OR >1/4
						= OR >50YD
						= OR >0
= OR >6500	.2	.7	1.4	1.4	1.4	1.4
= OR >5000	.7	1.2	1.9	1.9	1.9	1.9
= OR >3500	3.4	4.9	5.9	5.9	5.9	5.9
= OR >2000	8.6	17.6	20.3	20.3	20.6	21.3
= OR >1000	23.6	41.9	47.3	47.5	47.8	48.8
= OR >600	31.8	55.2	62.0	62.2	62.5	63.7
= OR >300	32.6	58.4	65.9	66.4	66.9	68.1
= OR >150	32.8	58.6	67.1	67.6	68.1	69.3
= OR > 0	33.4	60.6	71.3	73.3	75.3	77.9
TOTAL	198	359	422	434	446	461
TOTAL NUMBER OF OBS: 592		PCT FREQ NH <5/8: 22.0				

TABLE 7A									
PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)									
0	1	2	3	4	5	6	7	8	TOTAL
									OBS
2.2	1.2	3.4	8.1	6.2	6.2	12.0	11.4	41.5	7.8 643

MARCH

PERIOD: (PRIMARY) 1943-1970  
(OVER-ALL) 1901-1970

AREA 0009 ADAK  
51-55N 172-180W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ESE	E	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.1	.1	.1	.0	.4	.1	.1	.0	.0	.1	.2	.0	.0	.2	.0	.0	19	2.1
NO PCP	.0	.0	.0	.2	.2	.0	.2	.1	.1	.0	.0	.0	.0	.0	.0	.1	9	1.0
TOTAL	1	1	1	2	6	1	3	1	1	1	2	0	0	2	0	1	28	3.0
PCP	.5	.1	.2	.2	.5	.4	.2	.1	.1	.3	.4	.4	.1	.3	.0	.0	39	4.2
NO PCP	.2	.0	.0	.4	.3	.1	.3	.1	.0	.1	.1	.1	.1	.0	.0	.0	20	2.2
TOTAL	7	1	2	6	8	1	5	2	1	4	5	5	2	3	0	0	59	6.4
PCP	.4	.0	.4	.3	.4	.2	.4	.0	.3	.1	.3	.1	.2	.3	.0	.0	35	3.8
NO PCP	.5	.1	.0	.0	.2	.1	.0	.0	.1	.2	.2	.1	.0	.0	.0	.0	17	1.8
TOTAL	9	1	4	3	6	3	4	0	4	3	5	2	2	3	0	0	52	5.6
PCP	.5	.4	.4	.6	1.0	.4	.8	.2	.3	.1	.3	.0	.2	.1	.0	.0	57	6.2
NO PCP	.6	.2	.2	.4	.6	.3	.3	.2	.8	.1	.1	.3	.4	.1	.0	.0	50	5.4
TOTAL	11	6	6	10	15	7	10	4	10	2	4	3	6	2	0	0	107	11.6
PCP	.9	1.2	.8	.3	.6	.5	1.1	.3	1.5	.5	1.1	.2	.5	.4	.0	.0	113	12.2
NO PCP	2.9	.9	1.2	.8	1.1	1.3	1.5	1.4	1.4	2.2	2.6	.9	1.1	1.9	.0	.0	214	23.1
TOTAL	35	19	18	10	16	17	24	16	27	25	34	10	15	22	0	0	327	35.4
PCP	.3	.1	.3	.1	.1	.3	.5	.2	.0	.1	.3	.2	.0	.2	.0	.0	32	3.5
NO PCP	1.9	.6	2.4	2.1	2.3	1.2	2.9	2.1	1.5	3.6	3.7	2.1	2.1	2.1	.0	.8	320	34.6
TOTAL	21	7	25	20	22	14	32	21	14	34	37	21	19	21	0	7	352	38.1
TOTAL PCT	84 9.1	35 3.8	56 6.1	51 5.5	73 7.9	47 5.1	78 8.4	44 4.8	57 6.2	69 7.5	87 9.4	41 4.4	44 4.8	53 5.7	0	8 .9	925 100.0	



MARCH

PERIOD: (PRIMARY) 1943-1970  
(OVER-ALL) 1901-1970

AREA 0009 ADAK  
51-55N 172-180W

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	1	.1
	4-10	.0	.0	.0	.1	.1	.0	.0	.0	.1	.0	.0	.0	.1	.0	.0	.0	.0	.0	5	.4
	11-21	.1	.0	.0	.1	.1	.1	.0	.1	.1	.1	.0	.1	.1	.0	.1	.1	.0	.0	14	1.0
	22+	.1	.1	.1	.1	.1	.0	.1	.1	.1	.1	.1	.1	.0	.0	.0	.0	.0	.0	12	.9
	TOTAL	2	2	1	3	6	2	1	2	3	1	1	2	2	0	1	2	0	1	32	2.3
1/2<1	0-3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	2	.1
	4-10	.1	.0	.2	.0	.1	.2	.0	.1	.0	.1	.0	.1	.1	.1	.0	.0	.0	.0	16	1.2
	11-21	.1	.1	.1	.1	.3	.1	.0	.1	.1	.1	.0	.1	.3	.3	.0	.0	.0	.0	24	1.7
	22+	.3	.0	.0	.0	.3	.1	.1	.3	.3	.1	.1	.2	.0	.0	.0	.1	.0	.0	27	2.0
	TOTAL	7	1	4	1	10	6	1	7	6	3	2	5	6	5	2	3	0	0	69	5.0
1<2	0-3	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	2	.1
	4-10	.1	.2	.1	.1	.1	.0	.0	.1	.1	.0	.1	.1	.1	.0	.1	.1	.0	.0	15	1.1
	11-21	.4	.0	.1	.0	.1	.0	.1	.1	.1	.0	.1	.1	.3	.1	.1	.2	.0	.0	26	1.9
	22+	.1	.0	.1	.1	.3	.2	.1	.1	.2	.1	.4	.1	.1	.0	.1	.0	.0	.0	29	2.1
	TOTAL	9	3	5	2	6	3	3	3	6	1	9	5	7	2	3	5	0	0	72	5.2
2<5	0-3	.1	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.0	.1	.0	.0	.1	10	.7
	4-10	.2	.1	.2	.2	.2	.1	.3	.2	.2	.1	.3	.1	.2	.1	.1	.1	.0	.0	37	2.7
	11-21	.1	.1	.4	.1	.6	.1	.1	.1	.2	.1	.3	.2	.1	.1	.2	.1	.0	.0	44	3.2
	22+	.5	.1	.1	.4	.5	.6	.5	.3	.4	.4	.3	.4	.2	.2	.5	.0	.0	.0	75	5.5
	TOTAL	14	6	12	9	18	11	13	9	11	8	12	11	10	5	12	4	0	1	166	12.1
5<10	0-3	.1	.1	.0	.1	.0	.0	.1	.0	.1	.0	.1	.1	.1	.0	.1	.4	.0	.3	23	1.7
	4-10	.4	.6	1.2	.7	.9	.3	.7	.4	.4	.4	.7	.9	.9	.1	.3	.3	.0	.0	127	9.2
	11-21	1.6	.6	.9	.7	.9	.4	.9	.7	1.3	.9	1.2	.8	1.0	.4	.9	.9	.0	.0	194	14.1
	22+	1.4	.9	.5	.6	.6	.3	.5	.5	.7	.6	.9	.9	1.5	.4	.5	.7	.0	.0	155	11.3
	TOTAL	49	30	36	29	33	14	30	22	33	27	40	36	48	14	24	30	0	4	499	36.3
10+	0-3	.1	.0	.1	.0	.1	.0	.2	.1	.0	.0	.1	.0	.1	.1	.0	.0	.0	.8	22	1.6
	4-10	.4	.6	1.3	.9	1.1	.3	1.0	.7	1.1	.9	.2	.2	.6	.4	.7	.5	.0	.0	149	10.8
	11-21	.9	.6	1.2	.6	.9	.9	1.1	.7	1.2	1.5	1.2	1.4	2.2	.9	.7	1.0	.0	.0	233	16.9
	22+	.7	.1	.9	.3	1.2	.6	.4	.1	1.1	.4	.7	1.5	.9	.4	.4	.4	.0	.0	134	9.7
	TOTAL	27	17	47	24	45	24	37	22	46	38	30	42	51	25	25	27	0	11	538	39.1
	TOTAL	108	59	105	68	118	60	85	65	105	78	94	101	124	51	67	71	0	17	1376	100.0
	PCT	7.8	4.3	7.6	4.9	8.6	4.4	6.2	4.7	7.6	5.7	6.8	7.3	9.0	3.7	4.9	5.2	.0	1.2	100.0	

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PERIOD: (PRIMARY) 1943-1970  
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8), AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	500 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	9.5	1.3	1.9	17.1	25.9	15.2	2.5	.6	.0	.6	74.7	25.3	158
06009	11.3	1.3	4.7	13.3	28.7	14.7	4.7	.0	.0	.0	78.7	21.3	150
12015	10.0	.6	5.6	15.0	24.4	13.8	2.5	1.3	.6	1.3	75.0	25.0	160
18021	5.2	1.5	5.2	12.6	31.1	17.0	6.7	.0	.7	2.2	82.2	17.8	135
TOT	55	7	26	88	165	91	24	3	2	6	467	136	603
PCT	9.1	1.2	4.3	14.6	27.4	15.1	4.0	.5	.3	1.0	77.4	22.6	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	2.6	1.3	2.6	7.1	30.5	55.8	154
06009	4.1	1.4	2.0	12.9	29.3	50.3	147
12015	3.2	3.2	1.9	10.8	30.4	50.6	158
18021	1.5	2.3	1.5	14.3	32.3	48.1	133
TOT	17	12	12	66	181	304	592
PCT	2.9	2.0	2.0	11.1	30.6	51.4	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET, NH >4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00003	7.8	12.3	33.8	40.3	26.0	154
06009	11.6	19.7	38.1	42.2	19.7	147
12015	10.8	19.6	39.9	38.0	22.2	158
18021	5.3	12.0	35.3	48.1	16.5	133
TOT	53	95	218	248	126	592
PCT	9.0	16.0	36.8	41.9	21.3	100.0

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TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
43/49	.0	.0	.0	.0	.2	.4	.2	.1	9	.9
40/44	.0	.0	.1	.2	2.1	4.4	5.0	9.2	201	21.0
35/39	.0	.0	.3	.6	2.5	7.8	15.5	28.5	529	55.3
30/34	.0	.0	.0	.0	.4	2.4	7.0	8.8	178	18.6
25/29	.0	.0	.0	.0	.1	.2	.9	2.5	36	3.8
20/24	.0	.0	.0	.0	.0	.0	.0	.4	4	.4
TOTAL	0	0	4	8	51	146	274	474	957	100.0
PCT	.0	.0	.4	.8	5.3	15.3	28.6	49.5		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
43/49	.1	.0	.1	.0	.3	.2	.1	.0	.0	.1
40/44	.3	2.1	3.7	4.2	4.4	3.8	1.7	.2	.0	.7
35/39	5.0	6.8	6.6	7.2	9.1	7.8	7.6	4.8	.0	.3
30/34	4.0	3.8	2.8	.4	.4	1.1	2.5	3.1	.0	.4
25/29	1.7	1.0	.0	.1	.1	.0	.1	.7	.0	.0
20/24	.1	.0	.0	.0	.0	.0	.1	.2	.0	.0
TOTAL	107	131	126	114	137	124	116	87	0	15
PCT	11.2	13.7	13.2	11.9	14.3	13.0	12.1	9.1	.0	1.6

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HR	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
0003	49	45	43	37	30	25	19	37.2	405
0609	48	44	42	37	28	23	18	36.0	366
1215	44	42	40	36	27	22	19	35.2	274
1821	45	43	41	36	28	21	19	35.5	351
TOT	49	44	42	37	28	23	18	36.1	1396

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HR (GMT)	0-29	30-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
0003	.0	1.7	7.3	16.4	27.3	47.2	86	286
0609	.0	.7	5.2	16.4	31.2	46.5	86	269
1215	.0	2.0	4.7	15.3	30.7	47.3	86	150
1821	.0	.8	3.5	12.5	26.2	57.0	89	256
TOT	0	12	51	146	275	477	87	961

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	17	21	25	29	33	37	41	45	TOT	W FOG	MO FOG
	20	24	28	32	36	40	44	48			
9/10	.0	.0	.0	.0	.0	.0	.0	.0	1	.0	.1
7/8	.0	.0	.0	.0	.0	.0	.4	.4	6	.2	.5
6	.0	.0	.0	.0	.0	.0	.2	.0	2	.1	.1
5	.0	.0	.0	.0	.0	.5	1.1	.0	13	.2	1.4
4	.0	.0	.0	.0	.0	1.5	1.5	.0	24	.1	2.8
3	.0	.0	.0	.0	.0	1.8	1.2	.0	25	.4	2.7
2	.0	.0	.0	.0	.5	3.6	1.8	.1	49	.5	5.5
1	.0	.0	.0	.1	.2	5.5	.5	.0	52	.7	5.7
0	.0	.0	.0	.0	2.0	9.6	1.1	.1	104	.5	12.3
-1	.0	.0	.0	.0	2.5	6.2	.6	.0	75	.2	9.0
-2	.0	.0	.0	.6	7.1	4.9	.7	.0	109	.6	12.8
-3	.0	.0	.0	.1	4.3	2.6	.1	.0	58	.1	7.0
-4	.0	.0	.0	1.2	4.2	1.8	.2	.0	61	.4	7.1
-5	.0	.0	.0	1.1	4.9	1.4	.0	.0	60	.1	7.3
-6	.0	.0	.0	1.8	3.1	.5	.0	.0	44	.0	5.4
-7/-8	.0	.0	.4	4.4	2.7	.2	.0	.0	63	.0	7.7
-9/-10	.0	.0	1.4	1.6	.5	.0	.0	.0	28	.0	3.4
-11/-13	.0	.6	1.5	.9	.5	.1	.0	.0	29	.0	3.6
-14/-16	.1	.6	.5	.0	.0	.0	.0	.0	10	.0	1.2
TOTAL	1	10	30	97	264	327	79	5	813	35	778
PCT	.1	1.2	3.7	11.9	32.5	40.2	9.7	.6	100.0	4.3	95.7

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N										NE										48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL								
<1	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
1-2	.0	1.3	.0	.0	.0	.0	3	.0	.4	1.7	.0	.0	.0	5								
3-4	.0	1.3	1.7	.4	.0	.0	8	.0	1.7	.0	.0	.0	.0	4								
5-6	.0	.4	1.7	.4	.0	.0	6	.0	.0	.4	.4	.0	.0	3								
7	.0	.0	2.2	1.7	.0	.0	9	.0	.0	1.7	.9	.0	.0	6								
8-9	.0	.0	.9	1.3	.4	.0	6	.0	.0	.0	.9	1.3	.0	5								
10-11	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
12	.0	.0	.0	.0	.9	.0	2	.0	.0	.0	.4	.9	.0	3								
13-16	.0	.0	.0	.0	.0	.4	1	.0	.0	.0	.9	.4	.0	3								
17-19	.0	.0	.0	.0	.9	.4	3	.0	.0	.0	.0	.0	.0	0								
20-22	.0	.0	.0	.0	.9	.0	2	.0	.0	.0	.0	.4	.0	1								
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
33-40	.0	.6	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
TOTAL	0	7	15	9	7	2	40	0	5	9	8	8	0	30								
PCT	.0	3.0	6.5	3.9	3.0	.9	17.3	.0	2.2	3.9	3.5	3.5	.0	13.0								

HGT	E										SE										48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL								
<1	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0								
1-2	.0	.4	.0	.0	.0	.0	1	.4	.4	.4	.0	.0	.0	.0								
3-4	.0	.4	1.3	.0	.0	.0	4	.0	2.2	.9	.0	.0	.0	.0								
5-6	.0	.0	.9	.0	.0	.0	2	.0	.0	.4	.0	.0	.0	.0								
7	.0	.0	.4	.9	.4	.0	4	.0	.0	1.3	.0	.0	.0	.0								
8-9	.0	.0	.9	1.7	.9	.0	8	.0	.0	.0	.0	.4	.0	.0								
10-11	.0	.0	.0	.9	.0	.0	2	.0	.0	.4	.0	.0	.0	.0								
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0								
13-16	.0	.0	.0	.0	.9	.0	2	.0	.0	.0	.0	.0	.0	.0								
17-19	.0	.0	.0	.9	.0	.0	2	.0	.0	.0	.4	.0	.0	.0								
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0								
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0								
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0								
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0								
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0								
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0								
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0								
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0								
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0								
TOTAL	0	2	8	10	5	0	25	1	6	8	1	1	0	17								
PCT	.0	.9	3.5	4.3	2.2	.0	10.8	.4	2.6	3.5	.4	.4	.0	7.4								

PERIOD: (PRIMARY)		MARCH										AREA 0009		ADAK	
(OVER-ALL) 1963-1970		TABLE 18										51-55N		172-180W	
PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)															
HGT		S										SW			
		1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1		.0	.4	.0	.0	.0	.0	1	.0	.0	.0	.0	.0	.0	0
1-2		.0	.4	.0	.0	.0	.0	1	.0	.9	.4	.0	.0	.0	3
3-4		.0	1.7	1.3	.4	.0	.0	8	.0	.4	1.3	.4	.0	.0	5
5-6		.0	.4	2.6	.0	.0	.0	7	.0	.0	1.7	.9	.0	.0	6
7		.0	.0	1.3	.4	.0	.0	4	.0	.0	1.3	.0	.0	.0	3
8-9		.0	.0	.4	1.7	.0	.0	5	.0	.0	.9	.4	.0	.0	3
10-11		.0	.0	.0	.4	.0	.0	1	.0	.0	.9	.4	.0	.0	3
12		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
13-16		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
17-19		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
20-22		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
23-25		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL		.0	3.0	5.6	3.0	.0	.0	27	.0	3	15	5	.0	.0	23
PCT								11.7		1.3	6.5	2.2	.0		10.0

HGT		W										NW			
		1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1		.0	.9	.0	.0	.0	.0	2	.0	.0	.0	.0	.0	.0	0
1-2		.4	1.3	.0	.0	.0	.0	4	.0	.0	.9	.0	.0	.0	2
3-4		.0	.9	1.3	.4	.0	.0	6	.0	2.2	1.3	.0	.0	.0	8
5-6		.0	.4	3.9	.9	.0	.0	12	.0	.4	.9	.0	.0	.0	3
7		.0	.4	1.2	1.3	.0	.0	7	.0	.0	1.7	.9	.0	.0	6
8-9		.0	.0	.9	.4	.4	.4	5	.0	.0	.4	.4	.9	.0	4
10-11		.0	.0	.0	.4	.4	.0	2	.0	.0	.0	.4	.4	.0	2
12		.0	.0	.0	.0	.0	.0	0	.0	.0	.4	.4	.4	.0	2
13-16		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.4	1
17-19		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
20-22		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
23-25		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL		.4	3.9	7.4	3.5	.9	.4	38	.0	2.6	5.6	2.6	2.2	.4	31
PCT								16.5							13.4
															100.0

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PERIOD: (PRIMARY) 1963-1970  
(OVER-ALL)

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)								TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+			
<1	1.3	1.3	.0	.0	.0	.0			6
1-2	.9	5.1	3.4	.0	.0	.0			22
3-4	.0	10.7	8.0	1.7	.0	.0			50
5-6	.0	1.7	12.4	2.6	.4	.0			40
7	.0	.4	11.1	6.0	.4	.0			42
8-9	.0	.0	4.3	6.8	4.3	.4			37
10-11	.0	.0	1.3	2.6	.9	.0			11
12	.0	.0	.0	.9	2.1	.0			7
13-16	.0	.0	.4	1.3	1.7	.4			9
17-19	.0	.0	.0	1.3	.9	.9			7
20-22	.0	.0	.0	.0	1.3	.0			3
23-25	.0	.0	.0	.0	.0	.0			0
26-32	.0	.0	.0	.0	.0	.0			0
33-40	.0	.0	.0	.0	.0	.0			0
41-48	.0	.0	.0	.0	.0	.0			0
49-60	.0	.0	.0	.0	.0	.0			0
61-70	.0	.0	.0	.0	.0	.0			0
71-86	.0	.0	.0	.0	.0	.0			0
87+	.0	.0	.0	.0	.0	.0			0
TOTAL	5	45	98	54	28	4			234
PCT	2.1	19.2	41.9	23.1	12.0	1.7			100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.3	2.3	5.9	4.9	3.3	2.0	.3	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	59	4
6-7	.0	.3	2.3	6.2	6.8	4.6	2.3	1.0	1.6	2.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	85	8
8-9	.0	.0	1.3	3.9	5.9	5.2	2.0	2.0	.7	1.0	1.0	.0	.0	.0	.0	.0	.0	.0	.0	70	8
10-11	.0	.0	2.0	.3	1.3	2.0	2.6	1.3	1.6	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	35	8
12-13	.0	.0	.0	.3	.3	2.0	.3	.3	.3	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	12	9
>13	.0	.0	.0	.0	.0	.3	1.0	.0	.7	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	7	12
INDET	12.1	.0	.0	.0	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	39	0
TOTAL	38	8	35	48	54	49	26	14	18	10	7	0	0	0	0	0	0	0	0	307	6
PCT	12.4	2.6	11.4	15.6	17.6	16.0	8.5	4.6	5.9	3.3	2.3	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

APRIL

PERIOD: (PRIMARY) 1943-1970  
(OVER-ALL) 1901-1970

AREA 0009 ADAK  
51-55N 172-180W

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
				FRZG PCPN	SNOW	OTHER FRZN PCPN					FGD WD PCPN	SMOKE HAZE	DUST BLWG	NO SIG WEA	
N	.3	.0	.3	.0	.8	.0	.1	1.4	16	.0	.2	.0	.0	5.1	77
NNE	.1	.2	.0	.0	.9	.0	.0	1.0	12	.0	.2	.0	.0	2.2	40
NE	.4	.2	.2	.0	.6	.0	.0	1.4	16	.0	.3	.0	.0	3.4	58
ENE	.3	.1	.2	.0	1.1	.0	.0	1.6	19	.0	.3	.0	.1	1.5	41
E	.7	.0	.8	.0	1.2	.0	.0	2.6	30	.0	.3	.1	.0	4.0	82
ESE	.6	.0	.3	.0	.7	.0	.0	1.5	17	.0	.2	.1	.0	1.3	35
SE	1.2	.0	.5	.0	1.0	.0	.0	2.5	29	.0	.3	.1	.0	2.8	66
SSE	.5	.0	1.1	.0	.3	.0	.0	1.7	20	.0	.9	.0	.0	1.9	53
S	.7	.0	.5	.0	.4	.0	.0	1.5	18	.0	.9	.0	.0	4.8	84
SSW	.6	.2	.3	.0	.2	.0	.0	1.2	14	.0	.7	.1	.0	3.4	62
SW	.6	.0	.2	.0	.7	.0	.0	1.4	16	.0	.3	.3	.0	4.9	80
WSW	.5	.6	.1	.0	1.5	.0	.3	2.6	30	.0	.5	.2	.0	6.7	116
W	.3	.1	.7	.0	1.4	.0	.2	2.6	30	.0	.2	.0	.0	8.9	135
WNW	.2	.0	.0	.0	1.0	.0	.0	1.2	14	.0	.0	.1	.0	4.1	63
NW	.1	.1	.3	.0	1.2	.0	.0	2.1	24	.0	.1	.1	.0	4.8	82
NNW	.1	.1	.4	.0	1.3	.0	.0	1.8	21	.0	.0	.1	.1	4.0	70
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
CALM	.1	.0	.1	.0	.2	.0	.0	.3	4	.0	.3	.1	.0	.8	18
TOT OBS	90	17	70	0	168	0	6	28.4	330	0	66	14	2	750	1162
TOT PCT	7.7	1.5	6.0	.0	14.5	.0	.5			.0	5.7	1.2	.2	64.5	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
				FRZG PCPN	SNOW	OTHER FRZN PCPN					FGD WD PCPN	SMOKE HAZE	DUST BLWG	NO SIG WEA	
00003	7.6	.9	4.5	.0	17.6	.0	.3	29.4	97	.0	5.2	2.1	.3	63.0	330
06009	8.9	1.1	6.4	.0	11.7	.0	.7	27.4	77	.0	6.8	1.1	.0	64.8	281
12015	4.9	3.4	4.5	.0	9.1	.0	1.1	20.5	54	.0	4.9	.4	.4	73.9	264
18021	9.3	.7	8.3	.0	17.9	.0	.0	34.6	104	.0	6.3	1.0	.0	58.1	301
TOT	91	17	70	0	169	0	6	28.2	332	0	68	14	2	760	1176
PCT	7.7	1.4	6.0	.0	14.4	.0	.5			.0	5.8	1.2	.2	64.6	100.0



APRIL

PERIOD: (PRIMARY) 1943-1970  
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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-3	4-10	11-21	22-33	34-47	48+	TOTAL OBS	PCT FREQ	MEAN SPD		00	03	06	09	12
N	.4	2.2	3.1	1.2	.2	.0	117	7.1	15.1		6.8	.0	8.1	7.1	4.8
NNE	.1	.7	1.7	.8	.1	.0	56	3.4	16.8		3.0	3.4	2.2	3.0	3.2
NE	.5	1.9	1.8	.6	.1	.0	81	4.9	13.1		4.9	5.2	3.1	4.1	7.7
ENE	.2	1.6	1.3	.2	.1	.1	56	3.4	12.9		3.3	3.4	2.7	6.1	2.4
E	.2	2.4	3.5	1.0	.2	.1	121	7.4	15.2		9.8	8.6	7.6	7.1	4.0
ESE	.2	.7	1.5	.5	.3	.0	54	3.3	17.5		3.5	5.2	1.8	4.1	2.4
SE	.2	1.5	2.1	1.2	.6	.1	94	5.7	18.6		6.1	6.9	4.9	7.1	2.4
SSE	.2	.8	1.4	1.4	.4	.0	70	4.3	19.5		3.5	3.4	4.5	4.1	3.6
S	.2	1.4	2.3	1.9	.5	.2	109	6.6	19.8		5.4	3.4	9.9	6.6	7.7
SSW	.2	.8	1.5	1.8	.4	.1	78	4.7	21.1		4.4	1.7	7.2	3.0	6.0
SW	.2	1.0	2.4	2.2	.7	.0	107	6.5	20.6		6.6	10.3	7.2	3.0	6.5
WSW	.1	1.3	3.5	2.4	1.2	.2	144	8.8	22.0		7.5	10.3	10.8	9.1	14.5
W	.7	3.3	3.5	2.7	.7	.2	182	11.1	17.5		12.2	13.8	9.4	11.2	10.9
WNW	.2	1.4	2.6	1.1	.4	.0	94	5.7	16.8		5.4	5.2	7.6	4.6	6.0
NW	1.0	2.7	3.3	1.8	.4	.0	151	9.2	14.5		10.1	13.8	6.7	10.2	8.1
NNW	.4	1.3	2.2	1.3	.2	.0	91	5.5	16.2		4.7	5.2	5.8	3.6	6.9
VAR	.0	.0	.0	.0	.0	.0	40	2.4	.0		.0	.0	.0	.0	.0
CALM	2.4	414	622	364	106	17	1645	100.0	17.0		427	58	223	197	248
TOT OBS	122	25.2	37.8	22.1	6.4	1.0	1645				100.0	100.0	100.0	100.0	100.0
TOT PCT	7.4										100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD			00	03	06	09	12
N	1.8	4.1	3.7	.8	.1	173	10.5	15.7			9.8	3.4	10.3	10.2	8.1
NE	2.1	4.0	1.8	.4	.1	137	8.3	13.0			8.2	8.6	5.8	10.2	10.1
E	1.8	4.6	3.0	1.0	.2	175	10.6	15.9			13.3	13.8	9.4	11.2	6.5
SE	1.5	3.5	2.6	2.2	.2	164	10.0	19.0			9.6	10.3	9.4	11.2	6.0
S	1.3	4.3	2.7	2.4	.7	187	11.4	20.4			9.8	5.2	17.0	9.6	13.7
SW	1.4	4.3	5.4	3.4	.7	251	15.3	21.4			14.1	20.7	17.9	12.2	21.0
W	2.5	6.3	5.3	2.2	.4	276	16.8	17.3			17.6	19.0	17.0	15.7	16.9
NW	3.2	5.7	4.3	1.5	.1	242	14.7	15.1			14.8	19.0	12.6	13.7	14.9
VAR	.0	.0	.0	.0	.0	40	2.4	.0			.0	.0	.0	.0	.0
CALM	2.4	604	474	229	41	1645	100.0	17.0			427	58	223	197	248
TOT OBS	297										100.0	100.0	100.0	100.0	100.0
TOT PCT	18.1	36.7	28.8	13.9	2.5						100.0	100.0	100.0	100.0	100.0

APRIL

PERIOD: (PRIMARY) 1943-1970  
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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)									
HOUR	WIND SPEED (KNOTS)				CALM		PCT		TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	MEAN	FREQ	
0000	4.3	23.9	35.5	24.5	8.2	1.0	2.5	17.9	100.0
0600	4.5	29.0	36.2	20.2	6.4	.5	3.1	16.2	100.0
1200	3.4	19.1	40.9	25.8	6.4	2.0	2.3	18.6	100.0
1800	7.2	26.9	39.8	18.8	4.5	.9	1.8	15.8	100.0
TOT	82	414	622	364	106	17	40	17.0	1645
PCT	5.0	25.2	37.8	22.1	6.4	1.0	2.4	100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION								MEAN	
	0-2	3-4	5-7	8-10	11-15	16-20	21-25	26-30	CLOUD	COVER
N	.7	.0	2.9	3.4	5.8	6.6	6.8	6.8	6.6	6.6
NNE	.2	.4	.7	2.1	2.8	4.9	4.9	4.9	4.9	4.9
NE	1.3	.5	.9	1.7	2.1	4.2	4.2	4.2	4.2	4.2
ENE	1.0	.2	.6	.7	2.1	7.0	7.0	7.0	7.0	7.0
E	.5	.4	1.7	5.0	6.2	6.7	6.7	6.7	6.7	6.7
ESE	.4	.0	.4	1.8	2.1	7.3	7.3	7.3	7.3	7.3
SE	.0	.4	1.5	3.7	4.5	6.9	6.9	6.9	6.9	6.9
SSE	.2	.4	.9	2.8	3.5	7.3	7.3	7.3	7.3	7.3
S	.1	.4	2.0	5.6	6.6	7.0	7.0	7.0	7.0	7.0
SSW	.1	.6	1.1	3.1	4.0	7.0	7.0	7.0	7.0	7.0
SW	.4	.9	2.7	2.5	5.2	6.3	6.3	6.3	6.3	6.3
WSW	.5	2.0	3.9	3.2	7.8	6.1	6.1	6.1	6.1	6.1
W	.4	2.6	6.0	3.8	10.4	6.0	6.0	6.0	6.0	6.0
WNW	.1	.9	2.6	2.3	4.8	6.5	6.5	6.5	6.5	6.5
NW	.9	.6	2.6	3.4	6.1	6.3	6.3	6.3	6.3	6.3
NNW	.4	.4	1.8	3.8	5.2	6.8	6.8	6.8	6.8	6.8
VAR	.0	.0	.0	.0	0	.0	.0	.0	.0	.0
CALM	.1	.1	.1	.6	8	6.3	6.3	6.3	6.3	6.3
TOT OBS	60	86	264	405	815	6.5	6.5	6.5	6.5	6.5
TOT PCT	7.4	10.6	32.4	49.7	100.0					

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

WIND DIR	AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION												TOTAL
	000	150	300	600	950	1000	2000	3500	5000	6500	8000+	NH <5/8	
N	.5	.1	.0	.2	.2	2.1	1.7	.5	.1	.4	.0	1.5	58
NNE	.1	.0	.1	.9	.5	1.3	.4	.0	.0	.0	.0	.6	28
NE	.4	.0	.1	.5	.4	.4	.5	.4	.0	.0	.0	2.1	36
ENE	.0	.0	.0	.4	.4	.4	.4	.4	.0	.0	.0	1.3	21
E	.9	.0	.2	1.6	1.6	1.6	1.6	.1	.2	.0	.0	1.3	62
ESE	.5	.0	.2	.1	.1	.5	.4	.1	.0	.0	.0	.7	21
SE	.6	.2	.2	.4	.4	2.0	1.0	.0	.0	.0	.0	1.1	45
SSE	.7	.2	.0	.9	.5	1.0	.0	.0	.0	.0	.0	1.0	35
S	1.2	.2	.0	1.2	.5	2.5	.7	.7	.1	.0	.0	1.3	66
SSW	.9	.0	.4	.5	.4	1.0	.4	.4	.0	.0	.0	1.5	40
SW	.4	.0	.0	.4	.4	1.3	1.3	.5	.0	.0	.0	2.5	52
WSW	.5	.1	.0	.9	.6	2.6	1.2	.7	.0	.0	.0	3.6	78
W	.4	.2	.1	1.1	1.0	3.9	2.2	.6	.5	.0	.0	3.7	104
WNW	.0	.0	.1	1.0	1.6	.9	.9	.7	.0	.0	.0	1.6	48
NW	.2	.0	.1	.9	3.2	1.3	1.3	.4	.1	.0	.0	1.6	61
NNW	.4	.0	.1	.5	2.1	1.0	1.0	.0	.2	.1	.1	1.6	52
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.2	.0	.0	.0	.0	.1	.1	.1	.0	.0	.0	.4	8
TOT OBS	64	10	15	92	131	220	131	43	9	5	3	223	815
TOT PCT	7.9	1.2	1.8	11.3	16.1	27.0	16.1	5.3	1.1	.6	.4	27.4	100.0

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE OF CEILING HEIGHT (MH >4/8) AND VSBY (NM)									
CEILING (FEET)	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0	
= OR >6500	.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
= OR >5000	1.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1
= OR >3500	3.8	7.0	7.2	7.2	7.3	7.3	7.3	7.3	7.3
= OR >2000	11.9	20.7	22.6	23.0	23.2	23.3	23.3	23.3	23.3
= OR >1000	25.1	43.2	48.0	49.4	50.0	50.1	50.1	50.1	50.1
= OR >600	28.7	52.1	58.4	59.9	60.8	61.0	61.2	61.2	61.2
= OR >300	29.0	52.9	59.7	61.7	62.6	62.8	63.1	63.1	63.1
= OR >150	29.0	53.2	60.9	63.0	63.8	64.1	64.3	64.3	64.3
= OR > 0	29.1	55.0	64.3	67.2	68.9	70.5	72.0	72.4	72.4
TOTAL	238	450	526	550	564	577	589	592	592
TOTAL NUMBER OF OBS: 818		PCT FREQ NH <5/8: 27.6							

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
3.5	2.4	6.1	7.4	7.8	7.3	11.7	11.0	36.0	6.8	920	

APRIL

PERIOD: (PRIMARY) 1943-1970  
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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.1	.0	.1	.1	.0	.1	.1	.2	.0	.0	.0	.2	.0	.1	.1	.0	.0	.0	.11	.9
NO PCP	.0	.1	.2	.1	.2	.1	.1	.3	.6	.4	.0	.1	.2	.0	.0	.0	.0	.3	.31	2.7
TOTAL	1	1	3	2	2	2	2	6	7	5	0	3	2	1	1	0	0	4	42	3.6
1/2<1	.1	.0	.1	.2	.3	.2	.5	.1	.0	.1	.1	.2	.1	.1	.2	.1	.0	.0	.26	2.2
NO PCP	.0	.0	.0	.0	.0	.0	.0	.1	.2	.2	.1	.0	.1	.0	.0	.1	.0	.0	.8	.7
TOTAL	1	0	1	2	4	2	6	2	2	3	2	2	2	1	2	2	0	0	34	2.9
1<2	.0	.2	.3	.2	.2	.3	.3	.3	.1	.3	.2	.1	.3	.2	.0	.1	.0	.0	.34	2.9
NO PCP	.1	.2	.0	.1	.1	.2	.1	.2	.3	.1	.1	.1	.0	.0	.0	.2	.0	.0	.18	1.5
TOTAL	1	4	3	3	3	6	5	5	4	4	3	2	4	2	0	3	0	0	52	4.5
2<5	.5	.1	.4	.7	1.0	.7	.7	.5	.9	.3	.6	.4	.8	.3	.5	.7	.0	.3	109	9.4
NO PCP	.7	.1	.0	.2	.5	.3	.4	.4	.5	.5	.5	.4	.2	.2	.3	.1	.0	.0	.63	5.4
TOTAL	14	2	4	10	18	11	13	11	16	10	13	10	11	5	9	9	0	3	172	14.8
5<10	.4	.6	.4	.3	.8	.1	.4	.5	.4	.6	.3	1.4	.9	.7	1.0	.7	.0	.1	111	9.5
NO PCP	2.0	1.3	1.9	.3	1.2	.6	1.1	.9	1.9	2.0	2.7	3.4	4.2	1.2	2.2	1.7	.0	.3	336	28.9
TOTAL	28	22	27	7	23	8	18	16	27	30	34	55	59	22	38	28	0	5	447	38.4
10+	.3	.2	.1	.3	.3	.2	.5	.2	.3	.0	.3	.3	.3	.0	.4	.3	.0	.0	.44	3.8
NO FCP	2.5	.8	1.4	1.2	2.4	.4	1.5	.9	2.2	.9	2.1	3.4	4.3	2.8	2.5	2.1	.0	.5	372	32.0
TOTAL	32	11	17	17	31	7	23	12	29	11	28	43	54	33	34	28	0	6	416	35.8
TOTAL	77	40	58	41	81	36	67	52	85	63	80	115	132	64	84	70	0	18	1163	100.0
PCT	6.6	3.4	5.0	3.5	7.0	3.1	5.8	4.5	7.3	5.4	6.9	9.9	11.3	5.5	7.2	6.0	.0	1.5	100.0	

APRIL

PERIOD: (PRIMARY) 1943-1970  
(OVER-ALL) 1901-1970

AREA 0009 ADAK  
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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.2	6	.4
	4-10	.1	.1	.0	.1	.0	.1	.0	.1	.3	.1	.0	.0	.1	.0	.1	.0	.0		17	1.0
	11-21	.0	.0	.1	.0	.1	.0	.0	.0	.1	.1	.0	.1	.1	.1	.0	.0	.0		10	.6
	22+	.0	.1	.1	.0	.0	.1	.1	.2	.0	.1	.0	.2	.0	.0	.0	.0	.0		14	.9
	TOTAL	2	2	3	2	2	2	2	6	7	5	0	4	3	1	2	0	0	4	47	5.9
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.1	.1	.0	.0	.0	3	.2
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.0	.0	2	.1
	11-21	.0	.0	.1	.1	.2	.1	.1	.0	.0	.1	.1	.1	.1	.0	.0	.0	.0		10	.6
	22+	.1	.0	.1	.1	.2	.1	.2	.1	.1	.1	.2	.2	.2	.1	.0	.1	.0		20	1.2
	TOTAL	1	0	2	2	4	2	6	2	2	3	2	2	2	1	2	2	0	0	35	2.1
1<2	0-3	.0	.0	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	3	.2
	4-10	.0	.1	.1	.1	.1	.1	.1	.0	.1	.0	.1	.1	.1	.1	.0	.0	.0	.0	12	.7
	11-21	.1	.1	.0	.1	.2	.2	.2	.1	.1	.1	.1	.0	.1	.1	.0	.1	.0		27	1.7
	22+	.0	.1	.1	.1	.0	.1	.2	.2	.1	.2	.1	.2	.2	.0	.0	.1	.0		25	1.5
	TOTAL	1	4	4	4	5	7	8	5	4	4	4	4	5	4	0	4	0	0	67	4.1
2<5	0-3	.1	.0	.1	.0	.0	.0	.1	.0	.0	.0	.1	.0	.1	.1	.0	.1	.0	.5	16	1.0
	4-10	.2	.0	.2	.4	.8	.1	.2	.2	.1	.2	.1	.1	.4	.1	.2	.1	.0		52	3.2
	11-21	.8	.2	.2	.4	.4	.4	.5	.3	.2	.1	.2	.2	.1	.1	.2	.2	.0		76	4.6
	22+	.1	.1	.1	.0	.2	.2	.2	.2	.9	.4	.5	.4	.3	.2	.6	.2	.0		77	4.7
	TOTAL	20	5	10	12	22	12	15	12	20	12	14	11	15	8	15	10	0	8	221	13.5
5<10	0-3	.1	.0	.1	.1	.0	.1	.1	.1	.0	.0	.0	.1	.2	.0	.3	.1	.0	1.0	38	2.3
	4-10	.9	.3	.9	.4	.4	.4	.2	.2	.2	.4	.4	.5	1.0	.4	1.0	.2	.0		130	8.0
	11-21	.9	.7	.8	.3	1.1	.4	.6	.4	.7	.6	1.2	1.9	1.2	.9	1.5	.2	.0		231	14.1
	22+	.9	.6	.3	.1	.6	.2	.6	.7	1.1	1.3	1.3	1.8	2.0	.5	1.0	.9	.0		226	13.8
	TOTAL	44	25	35	14	34	19	25	23	33	38	47	70	73	29	63	36	0	17	625	38.2
10+	0-3	.2	.1	.2	.1	.1	.1	.1	.2	.1	.1	.1	.0	.2	.1	.6	.2	.0	.7	55	3.4
	4-10	1.0	.3	.7	.7	1.2	.1	1.0	.2	.7	.1	.5	.7	1.8	.9	1.4	1.0	.0		201	12.3
	11-21	1.3	.7	.6	.6	1.7	.4	.6	.6	1.2	.6	.9	1.3	1.9	1.5	1.6	.9	.0		253	16.1
	22+	.4	.1	.1	.1	.3	.1	.6	.3	.7	.1	1.0	1.1	1.0	.7	.6	.2	.0		121	7.4
	TOTAL	48	20	27	22	53	12	38	21	43	16	40	52	80	51	68	38	0	11	640	39.1
TOTAL		116	56	81	56	120	54	94	69	109	78	107	143	178	94	150	90	0	40	1635	100.0
PCT		7.1	3.4	5.0	3.4	7.3	3.3	5.7	4.2	6.7	4.8	6.5	8.7	10.9	5.7	9.2	5.5	.0	2.4	100.0	

PERIOD: (PRIMARY) 1943-1970  
(OVER-ALL) 1901-1970

APRIL

AREA 0009 ADAK  
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8), AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	6.8	.8	.8	11.8	27.8	13.1	6.3	2.1	.4	.0	70.0	30.0	237
06009	7.1	1.5	2.5	11.7	23.9	14.2	6.1	.0	.5	.0	67.5	32.5	197
12015	11.8	1.5	2.1	8.2	27.2	13.8	4.6	1.0	.5	.5	71.3	28.7	195
18021	6.5	.9	1.9	11.6	25.0	20.8	3.2	.9	.9	.9	72.7	27.3	216
TOT	67	10	15	92	220	131	43	9	5	3	595	250	845
PCT	7.9	1.2	1.8	10.9	26.0	15.5	5.1	1.1	.6	.4	70.4	29.6	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	1.8	2.2	3.1	11.9	30.1	50.9	226
06009	3.1	1.0	2.6	9.3	38.9	45.1	193
12015	5.8	1.6	3.7	9.4	34.0	45.5	191
18021	4.3	2.4	2.9	10.1	33.7	46.6	208
TOT	30	15	25	84	278	386	818
PCT	3.7	1.8	3.1	10.3	34.0	47.2	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET, NH >4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00003	7.1	10.6	31.0	43.4	25.7	226
06009	6.7	11.9	30.1	39.4	30.6	193
12015	12.0	17.3	31.9	42.4	25.7	191
18021	6.7	12.0	29.8	47.1	23.1	208
TOT	66	105	251	353	214	818
PCT	8.1	12.8	30.7	43.2	26.2	100.0

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PERIOD: (PRIMARY) 1943-1970  
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TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP												
TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ		
50/54	.0	.0	.0	.1	.2	.0	.1	.0	4	.4		
45/49	.0	.0	.0	.1	.4	.9	.4	.6	26	2.4		
40/44	.0	.0	.0	.4	2.9	3.4	6.6	13.2	293	26.6		
35/39	.0	.0	.0	.9	3.4	8.2	15.5	29.4	632	57.4		
30/34	.0	.0	.0	.0	.5	1.5	4.3	5.8	133	12.1		
25/29	.0	.0	.0	.0	.0	.1	.3	.7	12	1.1		
20/24	.0	.0	.0	.0	.0	.0	.0	.2	2	.2		
TOTAL	0	0	0	16	80	156	299	551	1102	100.0		
PCT	.0	.0	.0	1.5	7.3	14.2	27.1	50.0				

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP										
	N	NE	E	SE	S	SW	W	NW	VAR	CALM
50/54	.1	.1	.0	.0	.1	.0	.0	.1	.0	.0
45/49	.1	.5	.2	.3	.2	.1	.4	.4	.0	.3
40/44	1.0	1.5	5.4	4.0	4.7	3.4	3.1	2.5	.0	.9
35/39	5.7	4.5	7.2	5.6	5.5	9.0	9.1	9.8	.0	.9
30/34	2.5	1.2	.6	.5	.4	1.1	2.4	2.7	.0	.6
25/29	.3	.1	.0	.0	.0	.1	.1	.5	.0	.0
20/24	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
TOTAL	107	88	148	115	120	151	165	178	0	30
PCT	9.7	8.0	13.4	10.4	10.9	13.7	15.0	16.2	.0	2.7

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR										
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS	
0003	50	49	45	39	34	29	27	38.7	488	
0609	50	47	43	38	32	28	25	37.9	421	
1215	47	44	41	37	32	27	24	36.7	297	
1821	49	45	43	37	32	27	24	37.2	445	
TOT	50	46	43	38	32	28	24	37.7	1651	

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR										
HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS		
0003	.0	2.1	13.3	14.5	23.4	46.7	85	338		
0609	.0	2.1	3.1	12.8	29.7	52.4	87	290		
1215	.0	.6	4.5	21.7	32.5	40.8	85	157		
1821	.0	.6	6.2	11.1	26.3	55.7	88	323		
TOT	0	16	81	156	301	554	86	1108		

PERIOD: (PRIMARY) 1943-1970  
(OVER-ALL) 1901-1970

APRIL

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	21	25	29	33	37	41	45	49	TOT	W	WD
	24	28	32	36	40	44	48	52		FOG	FOG
11/13	.0	.0	.0	.0	.0	.2	.0	.2	4	.1	.3
9/10	.0	.0	.0	.0	.1	.0	.3	.0	4	.0	.4
7/8	.0	.0	.0	.0	.1	.9	.3	.0	13	.1	1.2
6	.0	.0	.0	.0	.1	.2	.2	.0	5	.0	.5
5	.0	.0	.0	.0	.6	1.6	.6	.0	27	.2	2.6
4	.0	.0	.0	.0	1.4	2.2	.0	.0	35	.3	3.3
3	.0	.0	.0	.1	2.1	1.8	.0	.0	38	1.1	2.8
2	.0	.0	.0	.2	5.8	3.5	.0	.0	92	1.4	8.1
1	.0	.0	.1	.5	6.5	.9	.0	.0	78	.5	7.5
0	.0	.0	.2	3.0	7.5	2.0	.0	.0	123	1.1	11.6
-1	.0	.0	.3	2.9	7.4	.6	.0	.0	109	.3	11.0
-2	.0	.0	.1	5.6	5.4	.3	.1	.0	111	.3	11.2
-3	.0	.0	.3	5.2	3.1	.2	.0	.0	85	.3	8.5
-4	.0	.0	.6	4.6	3.2	.1	.0	.0	82	.2	8.3
-5	.0	.0	.9	3.7	1.2	.0	.1	.0	58	.1	5.9
-6	.0	.0	.3	1.7	.5	.1	.0	.0	25	.1	2.5
-7/-8	.0	.1	1.6	2.7	.6	.1	.0	.0	49	.2	4.9
-9/-10	.0	.3	.6	.8	.4	.0	.0	.0	21	.0	2.2
-11/-13	.0	.1	.2	.3	.0	.0	.0	.0	6	.0	.6
-14/-16	.1	.0	.0	.1	.0	.0	.0	.0	2	.0	.2
TOTAL	1	5	51	303	447	142	16	2	967	63	904
PCT	.1	.5	5.3	31.3	46.2	14.7	1.7	.2	100.0	6.3	93.5



PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N					NE					TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47			
<1	.0	1.2	.0	.0	.0	.0	.0	.0	.0	.0	3	.0	0
1-2	.0	.4	3.3	.0	.0	.0	1.2	2.4	.0	.0	9	.0	9
3-4	.0	.4	.4	.4	.0	.0	.8	.4	.0	.0	3	.0	3
5-6	.0	.0	1.6	.0	.0	.0	.0	.4	.0	.0	4	.0	1
7	.0	.0	.8	.8	.4	.0	.0	.4	.0	.0	5	.0	1
8-9	.0	.0	.4	1.6	.0	.0	.0	.4	.0	.0	5	.0	1
10-11	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	1	.0	0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	0	5	16	8	1	0	5	10	0	0	30	0	15
PCT	.0	2.0	6.5	3.3	.4	.0	2.0	4.1	.0	.0	12.2	.0	6.1

HGT	E					SE					TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47			
<1	.8	.0	.0	.0	.0	.4	.4	.0	.0	.0	2	.0	2
1-2	.0	.0	.4	.0	.0	.0	.4	1.2	.0	.0	1	.0	4
3-4	.0	1.2	2.0	.0	.0	.0	.0	.4	.0	.0	8	.0	1
5-6	.4	.0	.4	.0	.0	.0	.0	.4	.4	.0	2	.0	2
7	.0	.0	.8	.0	.0	.0	.0	.4	.8	.0	2	.0	3
8-9	.0	.0	1.2	.0	.0	.0	.0	.4	.8	.0	3	.0	3
10-11	.0	.0	.4	.4	.8	.0	.0	.0	.4	.0	4	.0	1
12	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	1	.0	0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.4	.4	0	.0	2
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
20-22	.0	.0	.0	.0	.4	.0	.0	.0	.8	.0	1	.0	2
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	3	3	13	1	4	1	2	7	9	1	24	0	20
PCT	1.2	1.2	5.3	.4	1.6	.4	.8	2.8	3.7	.4	9.8	.0	8.1

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1970

APRIL

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ADAK  
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TABLE 18

FCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S										SW									
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL						
<1	.0	.4	.0	.0	.0	.0	1	.0	.0	.0	.0	.0	.0	0						
1-2	.0	1.6	.4	.0	.0	.0	5	.0	.8	1.6	.0	.0	.0	6						
3-4	.0	.4	.4	.0	.0	.0	2	.0	.4	.4	.0	.0	.0	2						
5-6	.0	.8	2.4	.0	.0	.0	8	.0	.0	.8	1.6	.0	.0	6						
7	.0	.0	.4	2.0	.0	.0	6	.0	.0	1.6	2.4	.0	.0	10						
8-9	.0	.4	.0	.4	.4	.0	3	.0	.0	.8	.8	.0	.0	4						
10-11	.0	.0	.0	.8	.4	.8	2	.0	.0	1.2	.8	.4	.0	6						
12	.0	.0	.0	.0	.4	.8	5	.0	.0	.0	.0	.4	.0	1						
13-16	.0	.0	.0	.0	.4	.8	3	.0	.0	.0	1.2	.0	.0	3						
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0						
20-22	.0	.0	.0	.0	.4	.0	1	.0	.0	.0	.8	.0	.0	2						
23-25	.0	.0	.0	.0	.4	.0	1	.0	.0	.0	.0	.0	.0	0						
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0						
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0						
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0						
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0						
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0						
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0						
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0						
TOTAL	.0	3.7	3.7	9	6	4	37	.0	3	16	19	2	.0	40						
PCT				3.7	2.4	1.6	15.0		1.2	6.5	7.7	.8		16.3						

HGT	W										NW									
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL						
<1	.0	.0	.0	.0	.0	.0	0	.0	.4	.0	.0	.0	.0	1						
1-2	.0	.8	1.2	.0	.0	.0	5	.0	.4	3.3	.0	.0	.0	9						
3-4	.0	.8	3.7	.0	.0	.0	11	.0	1.6	2.8	.8	.0	.0	13						
5-6	.0	.0	1.2	.0	.0	.0	3	.0	.0	.0	.4	.4	.0	2						
7	.0	.0	1.6	1.2	.0	.0	7	.0	.4	.0	.4	.0	.0	2						
8-9	.0	.4	1.2	2.0	1.2	.0	9	.0	.8	.4	.8	.0	.0	3						
10-11	.0	.0	.0	1.2	.0	.0	6	.0	.0	.4	.4	.0	.0	3						
12	.0	.0	.0	.4	.4	.0	1	.0	.0	.0	.4	.0	.0	1						
13-16	.0	.0	.0	.4	.0	.0	2	.0	.0	.0	.0	.0	.0	0						
17-19	.0	.0	.0	.4	.0	.0	1	.0	.0	.0	.0	.0	.0	0						
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0						
23-25	.0	.0	.0	.0	.4	.0	1	.0	.0	.0	.0	.0	.0	0						
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0						
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0						
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0						
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0						
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0						
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0						
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0						
TOTAL	.0	2.0	8.9	5.7	2.0	.0	18.7	.0	3.7	6.9	2.8	.4	.0	34						
PCT														13.8						

GRAND TOTAL	9	48	43	28	36	31	23	9	10	1	6	2	0	0	0	0	0	0	0	246	100.0
	1	9	13	2	2	3	3	1	0	0	0	0	0	0	0	0	0	0	34	100.0	

APRIL

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1970

AREA 0009 ADAK  
51-55N 172-180W

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)								TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+			
<1	4.0	2.4	.0	.0	.0	.0			16
1-2	.0	5.5	13.4	.0	.0	.0			48
3-4	.0	5.5	10.3	1.2	.0	.0			43
5-6	.4	.8	7.1	2.4	.4	.0			28
7	.0	.4	5.9	7.5	.4	.0			36
8-9	.0	1.6	4.7	5.5	.4	.0			31
10-11	.0	.0	2.0	4.3	2.8	.0			23
12	.0	.0	.0	1.6	1.2	.8			9
13-16	.0	.0	.0	2.0	1.2	.8			10
17-19	.0	.0	.0	.4	.0	.0			1
20-22	.0	.0	.0	1.6	.8	.0			6
23-25	.0	.0	.0	.0	.8	.0			2
26-32	.0	.0	.0	.0	.0	.0			0
33-40	.0	.0	.0	.0	.0	.0			0
41-48	.0	.0	.0	.0	.0	.0			0
49-60	.0	.0	.0	.0	.0	.0			0
61-70	.0	.0	.0	.0	.0	.0			0
71-86	.0	.0	.0	.0	.0	.0			0
87+	.0	.0	.0	.0	.0	.0			0
TOTAL	11	41	110	67	20	4			253
PCT	4.3	16.2	43.5	26.5	7.9	1.6			100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.3	12.3	7.0	4.3	2.4	1.6	.0	.5	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	108	3
6-7	.0	1.1	2.9	3.5	3.5	2.7	2.9	.3	1.1	.5	.3	.0	.0	.0	.0	.0	.0	.0	.0	70	7
8-9	.0	.0	.0	1.3	2.4	2.4	2.9	1.9	1.1	.5	.3	.0	.0	.0	.0	.0	.0	.0	.0	48	9
10-11	.0	.0	.0	.3	1.6	2.1	.8	.0	1.6	.0	.3	.5	.3	.0	.0	.0	.0	.0	.0	28	11
12-13	.0	.0	.0	.3	.3	1.1	.0	1.6	.8	.0	1.6	.3	.0	.0	.0	.0	.0	.0	.0	22	13
>13	.0	.0	.0	.0	.0	.0	.0	.3	.3	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	4	17
INDET	24.9	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	94	0
TOTAL	94	51	37	36	38	37	25	17	20	4	11	3	1	0	0	0	0	0	0	374	5
PCT	25.1	13.6	9.9	9.6	10.2	9.9	6.7	4.5	5.3	1.1	2.9	.8	.3	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1943-1969

(OVER-ALL) 1899-1969

MAY

TABLE 1

AREA 0009 ADAK

51-55N 172-180W

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION																
WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FOG WD PCPN	SMOKE HAZE	DUST BLWG	PHENOMENA SIG		
N	.6	.1	.6	.0	.1	.0	.1	1.4	25	.1	.8	.1	.0	5.7	141	
NNE	.5	.1	.2	.0	.1	.0	.0	.8	13	.0	.3	.1	.0	2.5	62	
NE	.5	.1	.5	.0	.3	.0	.1	1.3	22	.0	.2	.3	.0	2.4	71	
ENE	.6	.1	.8	.0	.3	.0	.0	1.5	26	.0	.3	.0	.0	1.3	53	
E	.9	.1	.3	.0	.2	.0	.0	1.5	26	.0	.3	.2	.0	2.7	81	
ESE	.9	.1	.8	.0	.0	.0	.0	1.7	29	.0	.5	.1	.0	1.4	64	
SE	1.2	.0	.8	.0	.0	.0	.0	2.0	34	.0	.8	.1	.0	2.7	95	
SSE	1.2	.1	.5	.0	.1	.0	.0	1.6	28	.0	.4	.1	.0	2.7	84	
S	1.0	.2	.8	.0	.1	.0	.0	2.1	36	.0	1.2	.1	.0	4.3	131	
SSW	.5	.0	.0	.0	.0	.0	.0	1.2	20	.0	1.1	.1	.0	2.6	90	
SW	.9	.0	.6	.0	.1	.0	.0	1.6	27	.0	1.4	.3	.0	5.7	155	
WSW	.6	.3	.3	.0	.0	.0	.1	1.3	22	.0	.8	.0	.1	6.6	151	
W	.5	.3	.2	.0	.1	.0	.0	1.0	18	.0	.6	.1	.0	8.5	177	
WNW	.4	.1	.3	.0	.1	.0	.0	.8	13	.0	.2	.0	.0	4.8	99	
NW	.5	.1	.9	.0	.0	.0	.1	1.4	25	.0	.5	.0	.0	6.1	139	
NNW	.4	.0	.2	.0	.1	.0	.0	.7	12	.0	.2	.1	.0	4.2	90	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0	
CALM	.2	.1	.0	.0	.0	.0	.0	.2	4	.0	.2	.0	.0	2.3	47	
TOT OBS	197	26	145	0	27	0	4	22.0	380	1	168	27	1	1153	1730	
TOT PCT	11.4	1.5	8.4	.0	1.6	.0	.2			.1	9.7	1.6	.1	66.6	100.0	

TABLE 2															
PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR															
HOUR (GMT)	RAIN	RA N SH/R	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OBS TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
				FRZG PCPN	SNOW	OTHER FRZN PCPN					FG WD	SMOKE HAZE	DUST BLWG	SIG DUST	
00003	10.6	1.6	5.1	.0	1.6	.0	.0	18.2	82	.0	9.8	2.4	.0	69.6	451
06009	10.0	.5	8.8	.0	.9	.0	.2	19.7	83	.0	11.6	1.7	.0	67.1	422
12015	12.8	2.5	8.0	.0	1.6	.0	.5	24.3	106	.2	7.8	1.1	.0	66.6	437
18021	11.5	1.8	11.3	.0	2.0	.0	.2	25.1	111	.0	9.9	.9	.2	63.9	443
TOT	197	28	145	0	27	0	4	21.8	382	1	171	27	1	1171	1753
PCT	11.2	1.6	8.3	.0	1.5	.0	.2	21.8		.1	9.8	1.5	.1	66.8	100.0

MAY

PERIOD: (PRIMARY) 1943-1969  
(OVER-ALL) 1899-1969

TABLE 3

AREA 0009 ADAK  
51-55N 172-180W

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-3	4-10	11-21	22-33	34-47	48+	TOTAL OBS	PCT FREQ	MEAN SPD		00	03	06	09	12
N	.4	2.6	4.0	1.0	.5	.0	192	8.5	14.8		6.8	9.6	7.1	10.6	9.3
NNE	.1	1.2	1.6	.5	.4	.0	86	3.8	15.2		4.8	2.4	4.9	3.0	2.8
NE	.1	2.5	2.1	.6	.2	.0	125	5.5	13.4		6.1	1.2	3.8	11.6	4.9
ENE	.2	.8	1.5	.6	.2	.0	76	3.4	17.1		4.2	1.2	1.9	5.0	2.8
E	.3	1.8	2.0	.8	.1	.0	113	5.0	14.3		4.8	6.0	3.6	6.0	5.2
ESE	.1	1.1	1.7	.7	.1	.0	87	3.8	16.1		4.2	2.4	4.1	6.5	2.6
SE	.5	2.0	2.2	.8	.3	*	133	5.9	14.6		5.0	10.8	6.8	5.5	5.7
SSE	.2	1.3	2.1	.7	.1	.0	99	4.4	15.2		4.0	3.6	3.8	2.5	4.4
S	.2	1.8	3.3	1.3	.2	.0	155	6.8	16.1		6.2	9.6	9.3	7.0	7.8
SSW	.1	1.2	1.9	1.1	.2	.0	105	4.6	17.0		5.9	1.2	5.2	3.0	4.4
SW	.3	3.0	3.5	1.1	.3	.0	187	8.2	14.9		7.9	7.2	9.0	3.5	8.3
WSW	.1	1.8	3.9	2.3	.3	*	193	8.5	17.9		8.4	12.0	6.0	8.5	10.3
W	.4	2.4	3.3	2.3	.5	*	203	9.0	17.3		9.7	9.6	10.4	5.5	9.3
WNW	.3	1.4	2.1	1.4	.0	*	119	5.2	15.8		3.7	3.6	8.0	3.0	7.5
NW	.6	2.5	4.0	1.8	.2	*	206	9.1	16.0		9.7	9.6	8.5	5.5	7.8
NNW	*	1.4	2.3	1.7	.3	*	131	5.8	18.2		6.8	9.6	6.6	6.0	2.6
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0		.0	.0	.0	.0	.0
CALM	2.5	657	941	426	90	7	57	2.5	.0		1.8	.0	1.9	3.0	4.4
TOT OBS	146	29.0	41.5	18.8	4.0	.3	2267	100.0	15.5		545	83	365	199	387
TOT PCT	6.4										100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD			00	03	06	09	12
N	2.3	5.8	3.0	1.0	.2	278	12.3	15.0			11.6	12.0	12.1	13.6	12.1
NE	1.8	4.2	1.9	.8	.2	201	8.9	14.8			10.3	2.4	5.8	16.6	7.8
E	1.3	4.2	2.5	.8	*	200	8.8	15.1			9.0	8.4	7.7	12.6	7.8
SE	2.1	4.4	2.9	.7	.2	232	10.2	14.8			9.0	14.5	10.7	8.0	10.1
S	1.7	4.5	4.0	1.0	.2	260	11.5	16.5			12.1	10.8	14.5	10.1	12.1
SW	2.6	6.4	5.9	1.8	.1	380	16.8	16.4			16.3	19.3	15.1	12.1	18.6
W	2.4	5.0	4.9	1.8	.1	322	14.2	16.8			13.4	13.3	17.3	8.5	16.8
NW	1.9	6.4	4.5	2.0	.1	337	14.9	16.8			16.5	19.3	15.1	15.6	10.3
VAR	.0	.0	.0	.0	.0	0	.0	.0			.0	.0	.0	.0	.0
CALM	2.5	929	670	223	26	57	2.5	.0			1.8	.0	1.9	3.0	4.4
TOT OBS	419	41.0	29.6	9.8	1.1	2267	100.0	15.5			545	83	365	199	387
TOT PCT	18.5										100.0	100.0	100.0	100.0	100.0

MAY

PERIOD: (PRIMARY) 1943-1969  
(OVER-ALL) 1899-1969

AREA 0009 ADAK  
51-55N 172-180W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	WIND SPEED (KNOTS)					CALM	PCT		TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	MEAN	FREQ	OBS
00003	3.8	30.4	40.8	18.5	4.3	.6	15.7	100.0	628
06009	3.2	30.0	42.9	18.1	3.4	.2	15.4	100.0	564
12015	4.5	23.9	41.4	21.4	4.7	.4	16.2	100.0	486
18021	4.2	30.7	41.1	17.7	3.6	.0	15.0	100.0	589
TOT	89	657	941	426	90	7	15.5	100.0	2267
PCT	3.9	29.0	41.5	18.8	4.0	.3	15.5	100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION								MEAN CLOUD COVER
	0-2	3-4	5-7	8 &	9-12	13-16	17-20	21-24	
N	.1	.4	2.1	5.4	11.0	7.3	7.4	7.4	7.3
NNE	.1	.1	.9	3.1	57	7.4	7.4	7.4	7.4
NE	.2	.2	1.0	2.6	55	7.0	7.0	7.0	7.0
ENE	.1	.0	.4	1.6	30	7.2	7.2	7.2	7.2
E	.0	.3	1.2	2.9	60	7.4	7.4	7.4	7.4
ESE	.0	.3	.4	2.2	40	7.4	7.4	7.4	7.4
SE	.2	.1	1.4	3.5	71	7.3	7.3	7.3	7.3
SSE	.1	.1	1.0	3.6	65	7.4	7.4	7.4	7.4
S	.1	.1	1.4	5.9	104	7.6	7.6	7.6	7.6
SSW	.1	.2	1.0	4.1	73	7.5	7.5	7.5	7.5
SW	.1	.4	3.0	5.2	120	7.2	7.2	7.2	7.2
WSW	.6	.7	2.9	4.4	116	6.7	6.7	6.7	6.7
W	.5	1.2	.9	6.4	151	6.7	6.7	6.7	6.7
WNW	.2	.2	2.1	4.0	89	7.1	7.1	7.1	7.1
NW	.1	.6	2.6	4.7	110	7.0	7.0	7.0	7.0
NNW	.5	.3	1.3	3.4	76	6.8	6.8	6.8	6.8
VAR	.0	.0	.0	.0	0	.0	.0	.0	.0
CALM	.4	.0	.5	1.8	38	6.6	6.6	6.6	6.6
TOT OBS	51	72	356	886	1365	7.1	7.1	7.1	7.1
TOT PCT	3.7	5.3	26.1	64.9	100.0				

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION										NH <5/8 TOTAL
	000	150	300	600	1000	2000	3500	5000	6500	8000+	
N	.3	.1	.1	1.6	3.4	1.5	.1	.0	.1	.0	.8
NNE	.4	.0	.5	.4	1.7	.4	.1	.0	.1	.0	.6
NE	.5	.0	.4	.4	1.2	.7	.0	.0	.1	.0	.7
ENE	.4	.0	.1	.3	1.2	.0	.0	.0	.0	.0	.2
E	.7	.1	.4	.4	1.6	.4	.2	.0	.0	.0	.6
ESE	.6	.1	.2	.3	.8	.2	.2	.0	.0	.0	.5
SE	1.3	.1	.3	.7	1.5	.6	.2	.0	.0	.0	.6
SSE	.5	.0	.1	.6	1.7	.7	.3	.1	.1	.0	.7
S	1.4	.1	.2	1.9	2.4	.7	.3	.0	.0	.0	.6
SSW	1.2	.1	.4	.8	1.5	.4	.3	.0	.0	.1	.4
SW	1.0	.1	.3	1.5	2.9	1.2	.5	.0	.0	.4	1.0
WSW	.5	.0	.3	1.4	2.6	.8	.8	.1	.0	.1	1.9
W	.7	.0	.0	1.5	3.2	2.6	.4	.1	.0	.0	2.6
WNW	.4	.0	.1	1.0	2.6	.9	.4	.0	.1	.1	.7
NW	.6	.1	.2	1.1	3.2	1.5	.3	.0	.0	.0	1.2
NNW	.3	.1	.2	.5	2.1	.8	.1	.1	.0	.0	1.3
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	.2	.0	.0	.4	1.0	.5	.1	.0	.0	.0	.5
TOT OBS	150	10	54	201	473	189	61	4	6	11	206
TOT PCT	11.0	.7	4.0	14.7	34.7	13.8	4.5	.3	.4	.8	15.1

PERIOD: (PRIMARY) 1943-1969  
(OVER-ALL) 1899-1969

MAY

AREA 0009 ADAK  
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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)									
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0		
= OR >6500	.2	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
= OR >5000	.4	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
= OR >3500	2.6	5.9	6.1	6.1	6.1	6.1	6.3	6.3	6.3	6.3
= OR >2000	9.1	18.7	19.6	19.8	19.8	19.9	20.1	20.1	20.1	20.1
= OR >1000	25.5	48.6	53.4	54.0	54.3	54.6	54.8	54.8	54.8	54.8
= OR >600	30.7	58.8	66.8	68.0	68.7	69.1	69.4	69.4	69.4	69.4
= OR >300	31.7	60.7	69.4	71.0	72.0	72.8	73.2	73.2	73.2	73.2
= OR >150	32.0	61.2	70.1	71.7	72.6	73.5	74.0	74.0	74.0	74.0
= OR > 0	32.2	63.2	74.0	77.0	79.1	82.4	84.9	84.9	84.9	84.9
TOTAL	440	864	1011	1053	1081	1127	1160	1161	1161	1161

TOTAL NUMBER OF OBS: 1367

PCT FREQ NH <5/8: 15.1

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

									TOTAL
									OBS
0	1	2	3	4	5	6	7	8	OBSCD
1.5	1.7	4.1	3.7	3.9	4.8	9.2	13.3	48.7	9.1
									1557

MAY

PERIOD: (PRIMARY) 1943-1969  
(OVER-ALL) 1899-1969

AREA 0009 ADAK  
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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.1	.0	.2	.1	.0	.0	.0	.1	.1	.1	.1	.1	.1	.0	.1	.1	.0	.0	16	.9
NO PCP	.2	.2	.0	.2	.3	.1	.3	.2	.4	.8	.5	.2	.2	.2	.3	.1	.0	.1	73	4.2
TOTAL	4	3	3	5	5	2	5	4	9	15	10	5	5	3	6	3	0	2	89	5.2
PCP	.0	.3	.1	.1	.1	.2	.1	.2	.1	.2	.2	.0	.0	.0	.2	.1	.0	.0	30	1.7
NO PCP	.1	.0	.0	.1	.1	.1	.0	.2	.1	.1	.3	.2	.1	.0	.1	.2	.0	.1	28	1.6
TOTAL	2	5	2	2	2	5	1	6	4	5	8	4	1	0	4	6	0	1	58	3.4
PCP	.2	.0	.1	.2	.2	.4	.5	.3	.3	.0	.1	.2	.1	.0	.0	.0	.0	.0	42	2.4
NO PCP	.1	.1	.1	.1	.1	.1	.3	.0	.4	.1	.3	.1	.2	.0	.1	.0	.0	.0	37	2.2
TOTAL	5	1	3	5	5	9	14	5	12	2	7	5	4	0	2	0	0	0	79	4.6
PCP	.2	.1	.2	.3	.6	.6	.8	.4	.5	.3	.3	.2	.5	.2	.1	.1	.0	.1	94	5.5
NO PCP	.5	.2	.2	.2	.3	.3	.2	.4	.5	.5	.5	.6	1.5	.3	.3	.3	.0	.3	122	7.1
TOTAL	11	6	7	10	16	15	17	14	17	13	15	14	33	8	7	7	0	6	216	12.6
PCP	.8	.3	.5	.7	.5	.3	.5	.6	1.0	.6	.9	.4	.3	.4	1.0	.3	.0	.2	163	9.5
NO PCP	2.2	1.0	1.0	.2	1.0	.5	.8	1.5	2.6	1.3	3.1	3.8	2.7	2.0	1.5	1.4	.0	.9	475	27.6
TOTAL	52	23	26	16	26	14	23	37	61	33	69	72	53	42	43	29	0	19	638	37.1
PCP	.2	.1	.1	.1	.1	.1	.2	.1	.1	.0	.1	.4	.2	.2	.2	.1	.0	.0	35	2.0
NO PCP	3.6	1.3	1.6	.8	1.5	1.0	1.9	1.0	1.4	1.2	2.5	2.4	4.5	2.5	4.4	2.5	.0	1.1	603	35.1
TOTAL	66	24	28	14	27	19	35	18	26	21	44	49	80	46	78	44	0	19	638	37.1
TOTAL	140	62	69	52	81	64	95	84	129	89	153	149	176	99	140	89	0	47	1718	100.0
PCT	8.1	3.6	4.0	3.0	4.7	3.7	5.5	4.9	7.5	5.2	8.9	8.7	10.2	5.8	8.1	5.2	.0	2.7	100.0	



MAY

PERIOD: (PRIMARY) 1943-1969  
(OVER-ALL) 1899-1969

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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	*	.0	.0	.1	7	.3
	4-10	.1	.0	.0	*	.1	.0	.1	.1	.1	.2	.2	.1	.1	*	.1	.0	.0		28	1.3
	11-21	.1	.1	*	.1	.1	.1	.1	.1	.3	.4	.2	.2	.0	*	.1	.1	.0		49	2.2
	22+	.0	*	.1	.0	*	.0	*	.0	.0	*	*	.0	.1	*	.0	*	.0		11	.5
	TOTAL	4	4	3	6	5	2	5	4	10	16	10	7	5	3	6	3	0	2	95	4.3
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	*	1	*
	4-10	.0	.0	*	*	.0	*	.0	.0	.0	*	.1	*	*	.0	*	*	.0		11	.5
	11-21	.1	*	*	.0	*	.1	*	.1	.1	.2	.2	.0	.0	.0	*	*	.0		23	1.0
	22+	.0	.2	*	*	*	.1	.0	.1	.1	.0	*	.1	.0	.0	.1	.2	.0		24	1.1
	TOTAL	2	5	3	2	2	5	1	6	4	5	8	4	1	0	4	6	0	1	59	2.6
1<2	0-3	.0	.0	.0	.0	.0	.0	*	.0	.0	.0	*	*	.0	.0	.0	.0	.0	.0	3	.1
	4-10	.2	.0	.2	*	.1	*	.1	.1	.1	.0	.1	*	.0	.0	.0	.0	.0		24	1.1
	11-21	.1	*	.3	*	.2	.2	.4	.2	.3	.0	.1	.1	.1	.0	.0	.0	.0		47	2.1
	22+	.0	.0	.0	.1	.0	.2	.2	.0	.1	.1	*	*	.1	.0	.1	.1	.0		24	1.1
	TOTAL	7	1	11	5	8	9	15	6	12	3	7	6	4	0	2	2	0	0	98	4.4
2<5	0-3	*	.0	.0	.0	*	.0	.1	.0	*	.0	.0	.0	.1	*	.0	.0	.0	.3	15	.7
	4-10	.1	.1	.4	*	.2	.2	.2	.1	.1	.1	.3	.0	.5	.0	.2	.1	.0		60	2.7
	11-21	.3	.1	.2	.2	.3	.5	.4	.3	.4	.3	.3	.4	.5	*	.3	*	.0		101	4.5
	22+	.2	.1	.1	.3	.4	.3	.3	.3	.3	.2	.2	.2	.5	.3	*	.2	.0		90	4.0
	TOTAL	13	7	14	12	22	24	22	14	19	15	18	15	37	8	11	8	0	7	266	11.9
5<10	0-3	.2	*	.0	*	.1	*	.1	*	*	.0	.1	*	*	*	.2	*	.0	1.0	45	2.0
	4-10	.8	.4	.9	.3	.7	.3	.6	.6	.9	.4	1.5	.8	.8	.4	.8	.4	.0		236	10.6
	11-21	1.6	.7	.8	.5	.5	.4	.4	1.0	1.4	.8	1.6	1.9	1.1	.8	1.2	1.1	.0		354	15.8
	22+	.7	.4	.3	.2	.4	.2	.4	.4	.8	.5	.9	1.4	.9	.7	1.0	.9	.0		225	10.1
	TOTAL	73	32	45	25	38	22	34	47	70	39	89	91	63	45	71	54	0	22	860	38.5
10+	0-3	.2	.1	.1	*	.1	*	.1	*	*	.0	.1	*	*	*	.2	*	.0	1.1	72	3.2
	4-10	1.5	.7	1.0	.3	.7	.5	1.0	.4	.5	.5	.9	.9	.9	.9	1.3	.8	.0		291	13.0
	11-21	1.8	.6	.7	.5	.8	.4	.9	.4	.9	.3	1.1	1.2	1.6	1.2	2.4	1.1	.0		353	15.8
	22+	.5	.1	.2	.1	*	*	.2	*	.2	.4	.3	.9	1.3	.4	.9	.6	.0		141	6.3
	TOTAL	91	34	46	20	37	24	54	22	38	26	53	68	90	62	111	57	0	24	857	38.3
	TOTAL	190	83	122	70	112	86	131	99	153	104	185	191	200	118	205	130	0	56	2235	100.0
	PCT	8.5	3.7	5.5	3.1	5.0	3.8	5.9	4.4	6.8	4.7	8.3	8.5	8.9	5.3	9.2	5.8	.0	2.5	100.0	

MAY

PERIOD: (PRIMARY) 1943-1969  
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET,NH >4/8),AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	7.4	.3	4.0	13.1	33.6	13.4	5.4	.3	.9	.9	79.2	20.8	351
06009	10.0	.9	3.1	14.9	35.4	13.1	5.7	.3	.3	.9	84.6	15.4	350
12015	16.2	.6	4.6	14.2	32.8	12.0	2.8	.6	.3	.9	84.9	15.1	351
18021	10.0	1.1	3.7	15.4	33.6	16.0	3.7	.3	.9	.6	85.2	14.8	351
TOT	153	10	54	202	475	191	62	5	8	11	1171	232	1403
PCT	10.9	.7	3.8	14.4	33.9	13.6	4.4	.4	.6	.8	83.5	16.5	100.0

TABLE 11

PERCENT FREQUENCY VS8Y (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	5.0	1.8	1.8	7.1	33.2	51.0	337
06009	6.4	2.3	3.8	12.3	31.3	43.9	342
12015	7.6	1.2	4.7	14.6	36.4	35.6	343
18021	4.3	2.9	2.0	10.7	38.0	42.0	345
TOT	80	28	42	153	475	589	1367
PCT	5.9	2.0	3.1	11.2	34.7	43.1	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VS8Y (NM) AND/OR  
CEILING HGT (FEET,NH >4/8),BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND5+	NH <5/8 AND 5+	TOTAL OBS
00003	7.4	13.1	29.4	53.4	17.2	337
06009	10.2	15.8	36.3	49.4	14.3	342
12015	16.0	22.7	44.6	42.0	13.4	343
18021	10.1	15.9	36.5	49.9	13.6	345
TOT	150	231	502	665	200	1367
PCT	11.0	16.9	36.7	48.6	14.6	100.0

MAY

PERIOD: (PRIMARY) 1943-1969  
(OVER-ALL) 1899-1969

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TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP													
TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ			
55/59	.0	.0	.0	.0	.1	.1	.1	.0	5	.3			
50/54	.0	.1	.0	.2	.4	.6	.6	.2	32	2.0			
45/49	.0	.0	.1	.1	.5	2.1	3.5	5.3	185	11.6			
40/44	.0	.0	.0	.4	2.6	6.9	15.5	27.9	847	53.3			
35/39	.0	.0	.0	.2	2.9	4.8	7.2	16.7	504	31.7			
30/34	.0	.0	.0	.0	.3	.2	.1	.5	16	1.0			
TOTAL	.0	.1	2	15	107	232	427	805	1589	100.0			
PCT	.0	.1	.1	.9	6.7	14.6	26.9	50.7					

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP											
N	NE	E	SE	S	SW	W	NW	VAR	CALM		
.0	.1	.0	.1	.0	.1	.1	.0	.0	.0		
.3	.3	.1	.3	.2	.3	.3	.3	.0	.1		
.7	1.6	1.4	1.6	1.8	1.9	1.0	1.2	.0	.4		
6.0	4.8	4.8	6.0	7.1	10.3	6.4	6.5	.0	1.3		
5.0	2.5	2.1	2.2	2.1	4.7	5.5	6.8	.0	.9		
.4	.3	.0	.0	.0	.0	.1	.1	.0	.0		
197	153	135	161	177	273	212	238	0	43		
12.4	9.6	8.5	10.1	11.1	17.2	13.3	15.0	.0	2.7		

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR										
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS	
00Z03	58	53	49	41	37	35	33	42.1	627	
06Z09	55	51	48	41	37	34	34	41.3	562	
12Z15	56	48	45	39	36	34	34	39.9	491	
18Z21	57	50	45	40	36	35	33	40.4	592	
TOT	58	52	47	41	36	34	33	41.0	2272	

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR									
HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS	
00Z03	.0	2.7	8.0	19.4	25.5	44.4	85	439	
06Z09	.0	.8	7.3	14.1	27.9	50.0	87	398	
12Z15	.0	.3	7.7	10.9	28.5	52.6	87	312	
18Z21	.0	.4	4.3	13.0	26.7	55.5	88	445	
TOT	0	18	107	233	431	805	87	1594	

PERIOD: (PRIMARY) 1943-1969  
(OVER-ALL) 1899-1969

MAY

AREA 0009 ADAK  
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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	33	36	37	40	41	44	45	49	53	57	TOT	M	WD FOG
17/19	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	2	.0	.1
14/16	.0	.0	.0	.0	.0	.0	.1	.1	.1	.0	4	.1	.2
11/13	.0	.0	.0	.0	.0	.0	.1	.2	.1	.0	6	.0	.4
9/10	.0	.0	.0	.0	.0	.0	.6	.8	.1	.0	21	.2	1.2
7/8	.0	.0	.1	.1	.8	.8	1.5	.2	.0	.0	37	.1	2.4
6	.0	.0	.1	.1	.8	.8	1.0	.0	.1	.0	27	.1	1.7
5	.0	.0	.1	.1	2.2	3.7	1.3	.0	.0	.0	52	.5	3.0
4	.0	.0	.5	.5	3.7	4.6	1.2	.1	.1	.0	83	1.1	4.6
3	.1	.1	1.0	1.0	4.6	7.9	.6	.1	.0	.0	93	1.0	5.3
2	.1	.1	3.5	3.5	7.9	1.0	.1	.0	.0	.0	186	1.5	11.2
1	.1	.1	4.2	4.2	4.9	.3	.0	.0	.0	.0	139	.8	8.8
0	.5	.5	11.2	11.2	6.9	.3	.0	.0	.0	.0	276	1.7	17.2
-1	.3	.3	8.2	8.2	1.8	.1	.0	.0	.0	.0	150	.7	9.6
-2	1.4	1.4	2.9	2.9	1.8	.7	.0	.0	.0	.0	170	.6	11.0
-3	1.5	1.5	2.7	2.7	.5	.5	.0	.0	.0	.0	74	.3	4.7
-4	.8	.8	2.3	2.3	.4	.4	.0	.0	.0	.0	57	.1	3.8
-5	.5	.5	.6	.6	.1	.1	.0	.0	.0	.0	48	.4	2.9
-6	.3	.3	.5	.5	.2	.2	.0	.0	.0	.0	17	.0	1.2
-7/-8	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	16	.1	1.0
-9/-10	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	1	.0	.1
-11/-13	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	1	.0	.1
TOTAL	91	672	542	121	24	9	1	1460	138	1322	100.0	9.5	90.5
PCT	6.2	46.0	37.1	8.3	1.6	.6	.1						



PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S					SW					TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47			
<1	.2	.6	.0	.0	.0	.0	.6	.0	.0	.0	4	.0	3
1-2	.2	1.2	1.8	.0	.0	.0	1.0	.8	.0	.0	16	.0	9
3-4	.4	.8	2.2	.0	.0	.2	1.8	3.5	.6	.0	17	.0	31
5-6	.0	.6	3.3	1.0	.0	.0	1.0	2.5	.4	.0	25	.0	20
7	.0	.0	1.4	1.2	.2	.0	.0	2.2	1.6	.0	14	.0	19
8-9	.0	.0	.0	.2	.0	.0	.0	.4	.2	.0	1	.0	3
10-11	.0	.0	.0	.4	.2	.0	.0	.2	.2	.0	3	.0	2
12	.0	.0	.0	.4	.2	.0	.0	.2	.6	.0	3	.0	4
13-16	.0	.0	.0	.2	.0	.0	.0	.0	.0	.2	1	.0	1
17-19	.0	.0	.0	.2	.0	.0	.0	.0	.0	.2	1	.0	1
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	4	16	44	18	3	1	22	50	18	2	85	.0	93
PCT	.8	3.1	8.6	3.5	.6	.2	4.3	9.8	3.5	.4	16.6	.0	18.2

HGT	W					NW					TOTAL	48+	TOTAL	GRAND TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47				
<1	.4	1.2	.0	.0	.0	.2	.8	.0	.0	.0	8	.0	5	32
1-2	.0	1.8	2.0	.0	.0	.4	1.2	.8	.0	.0	19	.0	12	110
3-4	.0	1.2	1.8	.6	.0	.0	1.6	1.8	.4	.0	18	.0	19	130
5-6	.0	.2	2.9	1.0	.0	.0	.0	1.4	.6	.0	21	.0	10	103
7	.0	.0	1.0	1.8	.2	.0	.2	1.0	.6	.0	15	.0	3	70
8-9	.0	.0	.4	.2	.0	.0	.0	.2	.6	.0	3	.0	4	14
10-11	.0	.0	.0	1.2	.0	.0	.0	.4	.4	.0	6	.0	4	17
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	9
13-16	.0	.0	.4	.2	.2	.0	.0	.0	.4	.2	4	.0	3	11
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	0	.0	3	7
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	0	.0	1	1
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0
TOTAL	2	22	43	25	2	3	19	28	18	2	94	.0	70	511
PCT	.4	4.3	8.4	4.9	.4	.6	3.7	5.5	3.5	.4	18.4	.0	13.7	100.0

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1969

MAY

AREA 0009 ADAK  
51-55N 172-180W

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	5.8	4.7	.0	.0	.0	.0					56
1-2	.9	10.5	9.2	.0	.0	.0					110
3-4	.7	7.9	13.8	1.9	.0	.0					130
5-6	.0	3.2	12.1	3.9	.0	.0					103
7	.0	.2	6.9	5.6	.4	.0					70
8-9	.0	.0	1.1	1.3	.2	.0					14
10-11	.0	.0	.7	2.1	.4	.0					17
12	.0	.0	.2	1.1	.4	.0					9
13-16	.0	.0	.4	.9	.7	.0					11
17-19	.0	.0	.0	.7	.6	.0					7
20-22	.0	.0	.0	.0	1.3	.0					1
23-25	.0	.0	.0	.0	.2	.0					0
26-32	.0	.0	.0	.0	.0	.0					0
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	40	141	238	94	22	0					535
PCT	7.5	26.4	44.5	17.6	4.1	.0					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+ TOTAL	MEAN HGT
<6	1.0	11.4	12.0	5.2	1.9	.3	.6	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3
6-7	.0	2.3	6.1	7.4	4.4	1.9	1.9	.4	1.0	.4	.4	.0	.0	.0	.0	.0	.0	.0	.0	6
8-9	.0	.6	4.1	3.4	4.8	1.5	.6	.7	.7	.6	.5	.3	.0	.0	.0	.0	.0	.0	.0	6
10-11	.0	.0	.1	.4	1.2	1.5	1.0	.1	.3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	8
12-13	.0	.0	.0	.1	.0	.1	.3	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	11
>13	.0	.0	.0	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	5
INDET	17.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2
TOTAL	129	98	153	115	84	37	30	9	15	8	5	2	1	0	0	0	0	0	0	6
PCT	18.8	14.3	22.3	16.8	12.2	5.4	4.4	1.3	2.2	1.2	.7	.3	.1	.0	.0	.0	.0	.0	.0	4

JUNE

PERIOD: (PRIMARY) 1943-1969  
(OVER-ALL) 1900-1969

AREA 0009 ADAK  
51-55N 172-180W

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FOG WO PCPN	SMOKE HAZE	DUST BLWG	NO SNOW	SIG WEA	
N	.3	.1	.3	.0	.0	.0	.0	.8	24	.0	1.4	.1	.0	5.3		240
NNE	.2	.1	.3	.0	.0	.0	.0	.6	19	.0	.9	*	.0	2.8		136
NE	.4	*	.6	.0	.0	.0	.0	1.0	33	.0	1.6	.2	.0	3.5		202
ENE	.5	*	.3	.0	.0	.0	.0	.9	27	.0	1.0	*	*	3.4		171
E	.9	.1	.6	.0	.0	.0	.0	1.5	48	.0	1.1	.1	.0	5.6		262
ESE	.2	.0	.3	.0	.0	.0	.0	.5	15	.0	.3	.1	.0	3.8		149
SE	.7	.0	.9	.0	.0	.0	.0	1.6	50	.0	.8	*	.0	4.6		221
SSE	.6	.0	.4	.0	.0	.0	.0	1.0	31	.0	.9	.1	.0	2.9		151
S	1.2	.1	1.1	.0	.0	.0	.0	2.4	75	.0	1.8	.1	.0	5.2		299
SSW	.5	*	.7	.0	.0	.0	.0	1.2	39	.0	.6	.1	.0	1.9		118
SW	.8	.3	.7	.0	.0	.0	*	1.8	56	.0	1.2	.1	.0	3.3		204
WSW	.3	.1	.5	.0	.0	.0	.0	.9	29	.0	1.0	*	.0	4.2		195
W	.3	.2	.4	.0	.0	.0	.0	.9	27	.0	1.6	.1	.0	6.7		292
WNW	.1	.1	.2	.0	.0	.0	.0	.3	11	.0	.4	.0	.0	2.7		109
NW	.2	.1	.2	.0	.0	.0	.0	.5	16	.0	1.0	.1	.0	4.6		197
NNW	.1	.1	.2	.0	.0	.0	.0	.3	10	.0	.6	.1	.0	3.3		137
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0		0
CAL	.1	.0	.2	.0	.0	.0	.0	.3	9	.0	.7	.2	.0	1.6		87
TOT OBS	237	38	250	0	0	0	1		519	0	539	42	1	2069		3170
TOT PCT	7.5	1.2	7.9	.0	.0	.0	*	16.4		.0	17.0	1.3	*	65.3		100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FOG WO PCPN	SMOKE HAZE	DUST BLWG	NO SNOW	SIG WEA	
00003	5.9	1.7	6.3	.0	.0	.0	.0	13.9	122	.0	16.3	1.5	.0	68.3		878
06009	3.5	1.2	8.0	.0	.0	.0	.0	17.5	134	.0	17.6	1.6	.0	63.4		767
12015	7.3	1.1	7.4	.0	.0	.0	.1	15.5	117	.0	12.9	.5	.1	71.0		754
18021	8.3	.9	10.2	.0	.0	.0	.0	19.0	151	.0	20.8	1.6	.0	58.6		795
TOT	238	39	253	0	0	0	1		524	0	540	42	1	2087		3194
PCT	7.5	1.2	7.9	.0	.0	.0	*	16.4		.0	16.9	1.3	*	65.3		100.0



JUNE

PERIOD: (PRIMARY) 1943-1969  
(OVER-ALL) 1900-1969

AREA 0009 ADAK  
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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)					15	18	21
	0-3	4-10	11-21	22-33	34-47	00	03	06	09	12												
N	.4	3.5	2.7	.7	.1	.0	285	7.4	11.8	6.3	5.7	9.5	8.4	8.5	4.3	8.0	7.0					
NNE	.4	2.2	1.7	.2	.1	.0	175	4.5	10.9	6.5	2.1	4.8	4.9	3.6	3.9	4.1	4.0					
NE	.6	2.8	2.4	.3	.1	.0	248	6.4	10.7	6.4	5.1	5.1	10.0	6.0	5.7	6.4	7.8					
ENE	.4	2.1	2.1	.5	*	.0	196	5.1	12.2	5.0	7.2	6.2	4.3	4.2	5.7	4.9	3.8					
E	.5	3.0	3.1	1.2	.1	.0	306	7.9	13.5	9.5	7.8	8.8	7.3	7.4	5.7	6.9	8.3					
ESE	.2	1.2	2.5	.5	*	.0	169	4.4	14.0	4.1	5.7	4.0	3.0	3.2	8.9	4.8	3.5					
SE	.5	2.0	3.7	.9	.0	.0	271	7.0	13.5	6.2	9.0	6.3	8.4	7.0	8.2	6.5	6.8					
SSE	.2	1.3	2.2	.8	.0	.0	178	4.6	14.4	3.8	5.1	4.9	4.9	5.4	3.5	4.9	4.3					
S	.4	2.4	4.7	1.2	*	.0	341	8.9	14.4	8.3	10.5	9.3	8.9	7.6	11.3	8.1	8.8					
SSW	.3	1.1	2.0	.4	.0	.0	146	3.8	13.6	2.7	1.2	3.2	4.9	4.7	3.9	5.1	4.8					
SW	.3	2.5	3.8	.5	.0	.0	275	7.1	12.8	7.7	9.9	5.5	5.4	7.6	9.2	5.8	7.5					
WSW	.3	2.2	3.1	.6	.1	.0	238	6.2	13.2	5.8	6.9	5.1	6.2	7.6	4.6	5.1	8.5					
W	.6	3.6	3.9	.8	.1	.0	343	8.9	12.4	8.7	7.8	9.0	6.5	9.6	9.6	10.4	8.8					
WNW	.2	1.6	1.2	.4	*	.0	136	3.5	12.4	3.7	3.0	3.0	4.9	2.5	3.2	4.9	2.8					
NW	.5	3.0	2.3	.8	*	.0	259	6.7	12.0	8.7	6.6	7.0	4.3	5.6	5.0	7.4	6.5					
NNW	.4	2.4	1.5	.4	.1	.0	179	4.6	11.4	4.4	4.5	4.4	4.9	6.1	5.3	3.7	4.3					
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0					
CALM	2.8	1422	1661	392	25	0	108	2.6	.0	2.1	1.5	3.9	3.2	3.4	2.1	2.8	3.0					
TOT OBS	353	9.2	43.1	10.2	.6	.0	3853	100.0	12.4	780	332	568	371	554	282	566	400					
TOT PCT	9.2	36.9						100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0					

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)								
	0-6	7-16	17-27	28-40	41+				00	03	06	09	12	15	18	21	
N	2.7	7.1	1.7	.4	.0	460	11.9	11.4	13.1	7.8	14.3	13.2	12.1	8.2	12.0	11.0	
NE	3.2	6.3	1.6	.5	*	444	11.5	11.4	11.3	12.3	11.3	14.3	10.1	11.3	11.3	11.5	
E	2.3	6.3	3.3	.5	.0	475	12.3	13.7	13.6	13.6	12.9	10.2	10.6	14.5	11.7	11.8	
SE	2.1	5.8	3.5	.3	.0	449	11.7	13.9	10.0	14.2	11.3	13.2	12.5	11.7	11.5	11.0	
S	1.8	6.1	4.4	.4	.0	487	12.6	14.2	11.0	11.7	12.5	13.7	12.3	15.2	13.3	13.5	
SW	2.2	7.6	3.2	.2	*	513	13.3	13.0	13.5	16.9	10.6	11.6	15.2	13.8	11.0	16.0	
W	2.8	6.7	2.5	.4	.0	479	12.4	12.4	12.4	10.8	12.0	11.3	12.1	12.8	15.4	11.5	
NW	2.9	6.1	1.9	.5	.0	438	11.4	11.8	13.1	11.1	11.4	9.2	11.7	10.3	11.1	10.8	
VAR	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	2.8	2001	850	123	2	108	2.8	.0	2.1	1.5	3.9	3.2	3.4	2.1	2.8	3.0	
TOT OBS	877	51.9	22.1	3.2	.1	3853	100.0	12.4	780	332	568	371	554	282	566	400	
TOT PCT	22.8						100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

JUNE

PERIOD: (PRIMARY) 1943-1969  
(OVER-ALL) 1900-1969

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	1-3	4-10	11-21	WIND SPEED (KNOTS)			CALM	MEAN	PCT		TOTAL OBS
				22-33	34-47	48+			FREQ		
0003	7.3	37.1	42.0	10.8	.9	.0	1.9	12.6	100.0		1112
0609	6.0	36.0	43.2	10.8	.4	.0	3.6	12.4	100.0		939
1215	5.5	36.4	44.6	10.2	.4	.0	3.0	12.3	100.0		836
1821	6.4	38.0	43.0	8.9	.8	.0	2.9	12.2	100.0		966
TOT	245	1422	1661	392	25	0	108	12.4			3853
PCT	6.4	36.9	43.1	10.2	.6	.0	2.8		100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WND DIR	BY WIND DIRECTION								TOTAL	MEAN
	0-2	3-4	5-7	8	9	10	11	12		
N	.5	.3	2.4	4.6	194	6.9				
NNE	.2	.1	.8	3.5	115	7.4				
NE	.2	*	.8	4.7	144	7.5				
ENE	.1	*	.8	4.4	130	7.7				
E	*	.1	1.3	7.0	210	7.7				
ESE	.2	.1	1.0	4.0	131	7.3				
SE	.1	.1	1.6	5.4	178	7.6				
SSE	.1	.2	.5	3.9	116	7.5				
S	.2	.3	1.3	8.2	248	7.6				
SSW	.1	*	.6	3.4	102	7.7				
SW	*	.2	.6	4.5	134	7.6				
WSW	.0	.1	1.1	4.1	132	7.6				
W	.2	.5	2.4	6.0	226	7.2				
WNW	.0	.1	.9	2.6	90	7.6				
NW	.1	.2	1.8	4.0	151	7.3				
NNW	.2	.2	1.3	2.5	107	7.0				
VAR	.0	.0	.0	.0	0	.0				
CALM	*	.1	.6	2.1	69	.0				
TOT OBS	59	66	495	1857	2477	7.5				
TOT PCT	2.4	2.7	20.0	75.0	100.0	7.4				

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

WND DIR	AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION																TOTAL
	000	149	150	199	300	599	600	999	1000	1999	2000	3499	4999	5000	6499	7999	
N	.8	.2	.2	.4	.4	.8	.8	.8	2.3	1.5	1.5	.2	.0	.0	.0	.0	194
NNE	.7	.1	.1	.1	.1	.8	.8	.8	1.1	1.1	1.1	.0	.0	.0	.0	.0	115
NE	1.3	*	*	.1	.1	.8	.8	.8	1.5	1.1	1.1	.1	.0	.0	.0	.0	144
ENE	.8	.0	.0	.1	.1	.8	.8	.8	1.5	1.2	1.2	.3	.0	.0	.0	.0	130
E	1.2	*	*	.2	.2	1.0	1.0	1.0	3.1	1.7	1.7	.5	*	*	*	*	210
ESE	.4	*	*	.2	.2	.4	.4	.4	1.7	1.4	1.4	.4	.4	.0	.0	.0	131
SE	.6	.0	.0	.3	.3	.9	.9	.9	2.6	1.5	1.5	.4	*	*	*	*	178
SSE	1.0	.1	.1	.2	.2	.4	.4	.4	1.6	.6	.6	.2	*	*	*	*	116
S	2.3	*	*	.6	.6	1.0	1.0	1.0	2.5	1.7	1.7	.2	.0	.0	.0	.0	248
SSW	.6	.0	.0	.2	.2	.8	.8	.8	1.0	1.1	1.1	*	.0	.0	.0	.0	102
SW	1.0	*	*	.1	.1	1.0	1.0	1.0	1.6	1.0	1.0	*	.0	.0	.0	.0	134
WSW	.5	.0	.0	.1	.1	1.2	1.2	1.2	1.5	1.2	1.2	.2	.1	.0	.0	.0	132
W	.6	*	*	.3	.3	1.7	1.7	1.7	2.9	2.2	2.2	.2	.0	.0	.0	.0	226
WNW	.1	*	*	.1	.1	.6	.6	.6	1.3	.7	.7	.3	.0	.0	.0	.0	90
NW	.4	.0	.0	*	*	.8	.8	.8	2.0	1.4	1.4	.4	.1	.1	.1	.1	151
NNW	.2	.0	.0	.4	.4	.3	.3	.3	1.1	1.2	1.2	.2	*	*	*	*	107
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.6	*	*	.0	.0	.6	.6	.6	.8	.3	.3	.0	.0	.0	.0	.0	69
TOT OBS	334	18	18	90	348	749	512	90	3.6	20.7	20.7	3.6	.5	.5	.5	.5	2477
TOT PCT	13.5	.7	.7	3.6	14.0	30.2	30.2	3.6	.3	12.3	12.3	.3	.3	.3	.3	.3	100.0

PERIOD: (PRIMARY) 1943-1969  
(OVER-ALL) 1900-1969

JUNE

AREA 0009 ADAK  
51-55N 172-180W

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NH)

CEILING (FEET)	VSBY (NH)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	.5	.8	.8	.8	.8	.8	.8	.8
= OR >5000	.8	1.3	1.3	1.3	1.3	1.3	1.3	1.3
= OR >3500	3.1	4.6	5.0	5.0	5.0	5.0	5.0	5.0
= OR >2000	13.5	21.5	23.9	25.3	25.4	25.5	25.6	25.6
= OR >1000	26.7	45.2	51.8	54.8	55.5	55.7	55.8	55.8
= OR >600	30.7	53.8	63.5	68.3	69.4	69.7	69.8	69.8
= OR >300	31.7	55.8	66.4	71.6	72.9	73.3	73.5	73.5
= OR >150	31.8	56.0	66.8	72.1	73.5	74.0	74.2	74.2
= OR > 0	31.9	57.3	69.7	76.9	80.5	84.9	87.7	87.7
TOTAL	792	1421	1728	1906	1997	2106	2174	2174

TOTAL NUMBER OF OBS: 2480

PCT FREQ NH <5/8: 12.3

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

TOTAL								
OBS								
0	1	2	3	4	5	6	7	8
1.3	2.1	3.4	2.8	2.8	3.7	7.6	12.3	53.1
2909								

JUNE

PERIOD: (PRIMARY) 1943-1969  
(OVER-ALL) 1900-1969

AREA 0009 ADAK  
51-55N 172-180W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.0	.1	.0	*	*	*	.0	.2	*	.1	.1	.0	.0	*	.0	.0	.1	24	.8
NO PCP	.5	.5	.8	.3	.3	.2	.5	.9	.2	.5	.2	.4	.1	.5	.3	.0	.4	222	7.0
TOTAL	16	17	26	12	15	6	17	32	8	21	9	13	4	17	9	0	14	246	7.8
PCP	.0	.1	.1	*	.1	*	.1	.3	.2	.3	.1	.1	.0	*	.0	.0	.0	49	1.6
NO PCP	.2	.1	.3	.4	.3	.1	.1	.4	.1	.1	.2	.3	.1	.3	.2	.0	*	96	3.0
TOTAL	5	4	13	15	17	4	4	20	7	12	10	11	3	10	5	0	1	145	4.6
PCP	.1	.2	.2	.2	.1	.2	.2	.5	.4	.4	.1	.2	.0	.0	.0	.0	.0	94	3.0
NO PCP	.4	.2	.5	.3	.2	.2	.2	.6	.3	.5	.7	.6	.2	.2	.1	.0	.3	181	5.7
TOTAL	14	11	22	16	20	9	12	35	23	29	25	25	6	7	2	0	8	275	8.7
PCP	.3	.2	.3	.3	.2	.7	.3	.6	.3	.3	.3	.2	.2	.2	.2	.0	.1	154	4.9
NO PCP	.6	.6	.5	.8	.9	.8	.5	1.2	.3	.8	.7	.8	.3	.5	.3	.0	.3	323	10.2
TOTAL	26	23	28	34	47	17	25	55	19	34	30	30	13	21	15	0	13	477	15.1
PCP	.3	.2	.4	.2	.1	.6	.3	.8	.4	.5	.3	.3	.2	.2	*	.0	.2	164	5.2
NO PCP	1.8	.8	1.3	1.2	1.7	1.8	1.3	2.1	.8	1.3	1.6	2.5	.9	1.5	1.1	.0	.5	749	23.7
TOTAL	67	30	54	46	60	51	51	89	37	58	63	88	33	53	36	0	21	913	28.9
PCP	.1	.0	*	*	*	.1	.1	.1	*	.2	*	.1	*	.1	.1	.0	.0	33	1.0
NO PCP	3.4	1.6	1.8	1.5	3.0	2.3	1.2	2.1	.7	1.4	1.8	3.8	1.6	2.8	2.1	.0	.9	1069	33.9
TOTAL	111	51	59	48	97	58	41	68	24	50	57	123	50	89	70	0	30	1102	34.9
TOTAL PCT	239 7.6	136 4.3	202 6.4	171 5.4	256 8.1	149 4.7	150 4.7	299 9.5	118 3.7	204 6.5	194 6.1	290 9.2	109 3.5	197 6.2	137 4.3	0	87 2.8	3158 100.0	100.0

JUNE

PERIOD: (PRIMARY) 1943-1969  
(OVER-ALL) 1900-1969

AREA 0009 AOA  
51-55N 172-180W

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	*	.0	.1	.1	*	*	.1	*	.1	.1	*	*	*	.0	.1	.1	.0	.6	51	1.3
	4-10	.2	.1	.3	.1	.1	.2	.1	.1	.2	*	.2	.1	.2	.1	.2	.3	.0		92	2.4
	11-21	.2	.3	.3	.2	.2	.1	.1	.2	.5	.1	.4	.1	.2	*	.1	.1	.0		117	3.1
	22+	*	*	*	.0	.1	.0	.0	.1	.1	*	.0	.0	*	.0	*	.0	.0		20	.5
	TOTAL	20	17	26	12	17	10	9	17	35	10	22	9	14	4	18	19	0	21	280	7.4
1/2<1	0-3	.0	.0	.1	*	.0	.0	.0	.0	.1	.0	.1	.0	*	.0	.1	.0	.0	*	11	.3
	4-10	.1	.1	.1	.2	.1	.1	.1	.1	.1	.1	.1	*	*	.0	.1	.1	.0		40	1.1
	11-21	.1	.1	.2	.2	.3	.1	*	.3	.1	.1	.2	.2	.2	.1	.1	.1	.0		81	2.1
	22+	.0	*	*	.0	.1	*	*	.1	.1	.1	.0	*	.0	.0	.0	.0	.0		18	.5
	TOTAL	5	5	13	15	20	4	4	4	20	7	12	11	11	3	10	5	0	1	150	4.0
1<2	0-3	.0	*	.2	*	*	.0	.0	*	.0	.0	.0	.0	*	.1	*	.0	.0	.2	23	.6
	4-10	.2	.2	.1	.1	.1	.1	.2	.1	.2	.1	.3	.2	.3	.1	*	.0	.0		90	2.4
	11-21	.1	.2	.2	.2	.2	.1	.2	.2	.4	.5	.4	.4	.3	.1	.1	.1	.0		140	3.7
	22+	.1	.0	.1	.1	.2	*	.0	.1	.3	*	.1	.1	.1	.1	.1	.1	.0	9	47	1.2
	TOTAL	16	14	22	17	20	9	12	16	35	24	31	25	27	10	9	4	0	9	300	7.9
2<5	0-3	.1	.2	.1	.1	.1	.1	.0	.0	*	.1	.1	.1	*	.0	.0	.1	.0	.4	47	1.2
	4-10	.3	.5	.4	.4	.3	.1	.3	.2	.3	.1	.2	.4	.4	.2	.2	.2	.0		178	4.7
	11-21	.2	.1	.2	.2	.5	.2	.8	.4	.8	.3	.6	.4	.5	.1	.2	.1	.0		214	5.7
	22+	.1	.1	.1	.2	.4	.1	.2	.2	.4	.1	.2	.1	.1	.1	.2	.1	.0		96	2.5
	TOTAL	26	33	32	36	49	19	52	27	57	20	38	36	36	16	24	19	0	15	535	14.1
5<10	0-3	.2	.1	.3	.1	.2	*	.1	*	.1	.1	.1	.1	.2	.1	.2	.1	.0	.7	95	2.5
	4-10	1.0	.7	1.0	.5	1.0	.3	.6	.4	.8	.5	.3	.7	1.2	.5	.3	.6	.0		442	11.7
	11-21	.9	.4	.9	.7	.8	.8	1.4	1.1	1.8	.6	1.4	1.1	1.1	.3	.6	.4	.0		548	14.5
	22+	.4	.1	.1	.3	.2	.3	.4	.1	.3	.1	.1	.3	.3	.2	.4	.2	.0		140	3.7
	TOTAL	91	49	83	60	84	56	94	63	113	49	92	84	110	41	82	48	0	26	1225	32.4
10+	0-3	.2	.1	.1	.1	.2	.0	.3	.1	.2	.1	.1	.1	.2	.1	.2	.1	.0	1.0	121	3.2
	4-10	1.8	.6	1.0	.8	1.3	.5	.8	.4	.9	.3	.8	.7	1.5	.7	1.5	1.2	.0		556	14.7
	11-21	1.2	.7	.7	.5	1.2	1.1	1.3	.4	1.0	.4	.8	.8	1.7	.6	1.1	.6	.0		530	14.0
	22+	.1	*	.1	*	.2	.1	.2	.3	.1	.1	.1	.2	.3	.2	.2	.1	.0		88	2.3
	TOTAL	124	57	70	55	110	61	96	46	79	32	69	67	142	61	112	78	0	36	1295	34.2
	TOTAL	282	175	246	195	300	159	267	173	339	142	264	232	340	135	255	173	0	108	3785	100.0
	PCT	7.5	4.6	6.5	5.2	7.9	4.2	7.1	4.6	9.0	3.8	7.0	6.1	9.0	3.6	6.7	4.6	.0	2.9	100.0	

JUNE

PERIOD: (PRIMARY) 1943-1969  
(OVER-ALL) 1900-1969

AREA 0009 AUAK  
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET,NH >4/8),AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	10.6	.6	2.5	10.6	29.8	21.3	3.5	1.0	.8	.4	81.2	18.8	714
06009	12.5	1.0	3.9	14.3	30.7	20.4	2.6	.2	.5	.2	86.2	13.8	609
12015	17.7	.2	3.6	14.1	29.2	19.7	3.4	.3	.3	.7	89.3	10.7	609
18021	12.4	1.2	4.5	16.4	28.7	19.2	5.0	.3	.2	.0	87.9	12.1	603
TOT	335	18	91	348	751	512	92	12	12	8	2179	356	2535
PCT	13.2	.7	3.6	13.7	29.6	20.2	3.6	.5	.5	.3	86.0	14.0	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	6.6	3.5	5.7	11.9	24.6	47.7	687
06009	6.4	3.7	7.2	12.9	26.6	43.2	597
12015	9.4	4.4	7.4	14.0	33.7	31.1	608
18021	7.1	3.6	9.9	13.1	26.9	39.5	588
TOT	182	94	185	321	691	1007	2480
PCT	7.3	3.8	7.5	12.9	27.9	40.6	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET,NH >4/8),BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND5+	NH <5/8 AND 5+	TOTAL OBS
00003	11.2	16.4	37.3	48.0	14.7	687
06009	12.7	19.4	43.4	44.7	11.9	597
12015	17.9	23.8	48.4	42.9	8.7	608
18021	12.8	19.7	46.6	44.6	8.8	588
TOT	337	490	1083	1120	277	2480
PCT	13.6	19.8	43.7	45.2	11.2	100.0

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TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP										TOTAL OBS
TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100		
60/64	.0	.0	.0	.0	.1	.1	.0	.0	2	
55/59	.0	.0	.0	.0	.1	.3	.4	.1	14	
50/54	.0	.0	.1	.1	1.0	1.2	2.9	1.8	136	
45/49	.0	.0	.0	.2	.5	5.1	12.4	15.2	646	
40/44	.0	.0	.0	.0	.9	5.4	13.8	33.6	1039	
35/39	.0	.0	.0	.0	.1	.3	1.2	3.4	95	
TOTAL	0	0	1	6	49	237	593	1046	1932	
PCT	.0	.0	.1	.3	2.5	12.3	30.7	54.1		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP												VAR	CALM
TEMP F	N	NE	E	SE	S	SW	W	NW	VAR	CALM			
60/64	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0		.0	.0
55/59	.0	.1	.2	.0	.1	.2	.2	.1	.0	.0		.0	.0
50/54	.7	.6	.7	1.1	.8	.9	1.0	.8	.0	.4		.0	.4
45/49	4.5	3.8	3.7	4.7	3.6	4.8	4.0	2.7	.0	1.7		.0	1.7
40/44	7.6	7.3	5.0	3.6	5.4	8.0	8.8	7.2	.0	.9		.0	.9
35/39	1.1	.4	.4	.3	.5	.3	1.1	.9	.0	.0		.0	.0
TOTAL	269	237	190	187	200	275	292	225	0	57		0	57
PCT	13.9	12.3	9.8	9.7	10.4	14.2	15.1	11.6	.0	3.0		.0	3.0

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR											
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS		
00003	60	55	52	45	41	39	37	45.3	1107		
06009	57	54	50	44	40	39	37	44.4	940		
12015	61	48	46	43	39	37	36	42.6	839		
18021	54	52	48	43	39	37	36	43.5	968		
TOT	61	54	50	43	39	38	36	44.0	3854		

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR								TOTAL
HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	OBS
00003	.0	.7	4.7	18.3	35.3	41.0	86	578
06009	.0	.4	1.3	12.9	28.7	56.6	89	519
12015	.0	.0	1.0	6.7	28.9	63.4	91	298
18021	.0	.2	2.2	8.1	28.7	60.8	90	544
TOT	0	7	49	237	595	1051	88	1939

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AREA 0009 ADAK  
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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	23	37	41	45	49	53	57	TOT	W	WD
	36	40	44	48	52	56	60	FOG	FOG	FOG
17/19	.0	.0	.0	*	.0	.1	.0	3	*	.1
14/16	.0	.0	.0	.0	.0	.1	.1	4	.1	.1
11/13	.0	.0	.0	.1	.3	.4	*	21	.3	.6
9/10	.0	.0	.0	.5	.7	.3	.0	34	.5	1.0
7/8	.0	.0	.7	1.0	.7	.2	*	63	.9	1.8
6	.0	.0	.4	.8	.3	*	.0	37	.5	1.1
5	.0	.0	.7	2.3	.8	.0	.0	89	.8	2.9
4	.0	.0	2.0	4.3	.3	*	.0	161	1.6	5.1
3	.0	.3	2.3	2.0	.0	.0	.0	110	1.5	3.1
2	.0	.2	6.5	9.5	.1	.0	.0	391	3.1	13.2
1	.0	.8	5.8	1.6	.1	.0	.0	198	1.2	7.1
0	*	2.5	21.4	7.9	*	.0	.0	765	3.8	28.0
-1	.0	1.8	3.7	1.0	*	.0	.0	158	1.0	5.6
-2	.0	2.3	5.6	1.0	.0	*	.0	213	1.1	7.8
-3	.0	.5	1.4	.2	.0	.0	.0	49	.2	1.9
-4	*	.9	1.0	.4	.0	.0	.0	56	.2	2.1
-5	.0	.5	.5	.2	*	.0	.0	29	.1	1.1
-6	.0	.1	.2	.0	.0	.0	.0	8	.1	.2
-7/-8	.0	.0	.1	*	.0	.0	.0	4	*	.1
-9/-10	.0	*	.1	.0	.0	.0	.0	3	*	.1
-11/-13	.0	.0	.2	.0	.0	.0	.0	4	.1	.1
TOTAL	2	234	1262	790	81	27	4	2400	406	1994
PCT	.1	9.8	52.6	32.9	3.4	1.1	.2	100.0	16.9	83.1



PERIOD: (PRIMARY) JUNE AREA 0009 ADAK  
(OVER-ALL) 1963-1969 51-55N 172-180W  
TABLE 18 PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.6	.9	.0	.0	.0	.0	7	.2	1.7	.0	.0	.0	.0	9
1-2	.2	3.0	2.2	.0	.0	.0	25	.0	1.9	.9	.0	.0	.0	13
3-4	.0	2.4	2.8	.0	.0	.0	24	.0	.6	2.2	.0	.0	.0	13
5-6	.0	.4	2.2	.2	.0	.0	13	.0	.0	1.5	.0	.0	.0	7
7	.0	.0	.6	.2	.2	.0	5	.0	.4	.9	.0	.0	.0	6
8-9	.0	.0	.4	.4	.0	.0	4	.0	.0	.4	.2	.0	.0	3
10-11	.0	.0	.2	.0	.0	.0	1	.0	.0	.2	.2	.0	.0	2
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
13-16	.0	.0	.0	.0	.2	.0	1	.0	.0	.0	.0	.0	.0	0
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	4	31	39	4	2	0	80	1	22	28	2	0	0	53
PCT	.9	6.7	8.4	.9	.4	.0	17.2	.2	4.7	6.0	.4	.0	.0	11.4

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.0	.6	.0	.0	.0	.0	3	.0	.0	.0	.0	.0	.0	0
1-2	.2	2.2	1.7	.0	.0	.0	19	.0	1.5	1.7	.0	.0	.0	15
3-4	.2	.9	2.4	.2	.0	.0	17	.0	.2	1.7	.0	.0	.0	9
5-6	.0	.0	.9	.0	.0	.0	4	.0	.4	.6	.0	.0	.0	5
7	.0	.4	.9	.4	.4	.0	10	.0	.0	.0	.2	.0	.0	1
8-9	.0	.0	.9	.0	.0	.0	4	.0	.0	.2	.4	.0	.0	3
10-11	.0	.0	.2	.4	.0	.0	3	.0	.0	.0	.0	.0	.0	0
12	.0	.0	.0	.2	.2	.0	2	.0	.0	.0	.0	.0	.0	0
13-16	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	2	19	32	6	3	0	62	0	10	20	3	0	0	33
PCT	.4	4.1	6.9	1.3	.6	.0	13.4	.0	2.2	4.3	.6	.0	.0	7.1

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S					SW					TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47			
<1	.0	.9	.0	.0	.0	.2	.6	.0	.0	.0	4	.0	4
1-2	.0	1.1	.4	.0	.0	.2	1.3	1.3	.0	.0	7	.0	13
3-4	.0	.4	1.5	.2	.0	.0	.6	2.8	.0	.0	10	.0	13
5-6	.0	.0	.6	.6	.0	.0	.2	.6	.0	.0	6	.0	13
7	.0	.0	.6	.2	.0	.0	.2	.9	.0	.0	4	.0	4
8-9	.0	.0	.2	.2	.0	.0	.2	.0	.0	.0	2	.0	5
10-11	.0	.0	.0	.2	.0	.0	.0	.0	.2	.0	1	.0	1
12	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	0	.0	1
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	2
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	0	11	16	7	0	2	15	26	3	0	34	0	46
PCT	.0	2.4	3.4	1.5	.0	.4	3.2	5.6	.6	.0	7.3	.0	9.9

HGT	W					NW					TOTAL	46+	TOTAL	GRAND TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47				
<1	.9	2.2	.0	.0	.0	.9	1.1	.0	.0	.0	14	.0	9	50
1-2	.0	1.9	2.4	.0	.0	.0	2.4	1.5	.0	.0	20	.0	18	130
3-4	.0	1.7	2.4	.2	.0	.0	1.3	2.6	.0	.0	20	.0	18	127
5-6	.0	.4	2.8	.9	.0	.0	.2	1.3	.2	.0	19	.0	8	66
7	.0	.0	1.7	1.3	.0	.0	.0	.2	.6	.0	14	.0	2	47
8-9	.0	.0	.2	.4	.0	.0	.0	.0	.4	.2	3	.0	3	23
10-11	.0	.0	.2	.2	.0	.0	.0	.0	.0	.0	2	.0	3	13
12	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	1	.0	0	5
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2	.0	0	3
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0
TOTAL	4	29	45	17	0	4	23	26	7	1	95	0	61	464
PCT	.9	6.3	9.7	3.7	.0	.9	5.0	5.6	1.5	.2	20.5	.0	13.1	100.0

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1969

JUNE

AREA 0009 ADAK  
51-55N 172-180W

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	8.5	7.5	.0	.0	.0	.0					79
1-2	.6	14.4	11.4	.0	.0	.0					130
3-4	.2	7.7	17.2	.6	.0	.0					127
5-6	.0	1.6	9.9	1.8	.0	.0					66
7	.0	1.0	5.5	2.4	.6	.0					47
8-9	.0	.2	2.2	2.2	.0	.0					23
10-11	.0	.0	.8	1.6	.2	.0					13
12	.0	.0	.0	.8	.2	.0					5
13-16	.0	.0	.0	.4	.2	.0					3
17-19	.0	.0	.0	.0	.0	.0					0
20-22	.0	.0	.0	.0	.0	.0					0
23-25	.0	.0	.0	.0	.0	.0					0
26-32	.0	.0	.0	.0	.0	.0					0
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	46	160	232	49	6	0					493
PCT	9.3	32.5	47.1	9.9	1.2	.0					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT	
<6	2.9	13.3	19.2	6.9	4.0	1.4	.5	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	281	3
6-7	.0	1.7	7.4	5.9	3.1	.7	.5	.5	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	119	5
8-9	.0	.7	3.3	4.5	3.3	1.0	1.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	81	5
10-11	.0	.2	.0	.7	.3	.9	.7	.3	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	19	7
12-13	.0	.0	.0	.0	.0	.0	.2	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	5	10
>13	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2	10
INDET	12.3	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	72	0
TOTAL	88	92	174	104	4	24	17	11	7	0	0	0	0	0	0	0	0	0	0	0	579	3
PCT	15.2	15.9	30.1	18.0	10.7	4.1	2.9	1.9	1.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

JULY

PERIOD: (PRIMARY) 1936-1969  
(OVER-ALL) 1899-1969AREA 0009 ADAK  
51-55N 172-180W

TABLE 1

## PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN DBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL DBS
				PCPN	FRZG	SNOW	OTHER PRZN				PCPN	FOG	SMOKE	DUST	NO	
N	.2	.0	*	.0	.0	.0	.0	.0	5	.0	.9	.0	.0	.0	2.4	76
NNE	.1	.0	.1	.0	.0	.0	.0	.3	6	.0	.6	*	*	.0	.9	39
NE	.2	.0	.3	.0	.0	.0	.0	.5	11	.0	.6	*	*	.0	1.7	59
ENE	.3	.0	.4	.0	.0	.0	.0	.6	12	.0	.7	.0	.0	.0	1.5	57
E	.5	*	.8	.0	.0	.0	.0	1.4	29	.0	1.7	*	*	*	3.1	132
ESE	1.0	.0	.5	.0	.0	.0	.0	1.6	33	.0	1.1	*	*	.0	1.8	97
SE	1.1	.0	.5	.0	.0	.0	.0	1.6	34	.0	2.1	.1	.1	.0	2.5	134
SSE	.7	*	.6	.0	.0	.0	.0	1.3	27	.0	1.7	.0	.0	.0	2.4	116
S	1.5	.1	.9	.0	.0	.0	.0	2.5	52	.0	3.4	.2	.0	.0	4.0	215
SSW	1.0	.1	.5	.0	.0	.0	.0	1.6	34	.0	2.5	.0	.0	.0	3.1	152
SW	1.5	*	.7	.0	.0	.0	.0	2.2	46	*	4.5	.2	.0	.0	4.8	247
WSW	.7	.0	1.0	.0	.0	.0	.0	1.6	34	.0	2.9	.1	.0	.0	4.1	185
W	1.0	*	.9	.0	.0	.0	.0	2.0	42	.0	3.7	.4	.0	.0	8.4	307
WNW	.2	*	.2	.0	.0	.0	.0	.4	9	.0	1.0	.1	.0	.0	2.6	87
NW	.1	.0	.1	.0	.0	.0	.0	.2	5	.0	1.4	.1	.0	.0	2.9	100
NNW	.0	.0	.1	.0	.0	.0	.0	.1	3	*	.9	.1	.0	.0	1.5	57
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
CALM	.1	.0	.4	.0	.0	.0	.0	.5	10	.0	1.1	.0	.0	.0	1.0	56
TOT DBS	215	9	175	0	0	0	0	5	392	2	655	35	1	1031	2116	
TOT PCT	10.2	.4	8.3	.0	.0	.0	.0	18.5	.1	31.0	1.7	*	*	48.7	100.0	

TABLE 2

## PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN DBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL DBS
				PCPN	FRZG	SNOW	OTHER PRZN				PCPN	FOG	SMOKE	DUST	NO	
0003	10.7	.3	7.0	.0	.0	.0	.0	.0	107	.0	29.8	2.0	.0	.0	50.7	610
0609	10.4	.6	7.7	.0	.0	.0	.0	.0	95	.0	30.6	2.7	.0	.0	48.4	519
12015	7.4	.4	8.8	.0	.0	.0	.0	.0	82	.2	26.7	1.0	.0	.2	55.4	498
18021	11.8	.6	9.4	.0	.0	.0	.0	.0	112	.2	36.8	1.0	.0	.0	40.5	519
TOT	217	10	176	0	0	0	0	0	396	2	665	36	1	1046	2146	
PCT	10.1	.5	8.2	.0	.0	.0	.0	18.5	.1	31.0	1.7	*	*	48.7	100.0	

JULY

PERIOD: (PRIMARY) 1934-1969  
(OVER-ALL) 1899-1969

AREA 0009 ADAK  
51-55N 172-180W

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-3	4-10	11-21	22-33	34-47	48+	TOTAL OBS	PCT FRFQ	MEAN SPD		00	03	06	09	12
N	.4	2.0	1.3	.1	.0	.0	113	3.8	9.8		5.2	2.4	3.6	3.5	3.1
NNE	.3	1.3	.7	*	.0	.0	70	2.3	8.7		2.2	1.0	2.4	3.2	2.8
NE	.6	1.4	1.1	.1	.0	.0	95	3.2	9.9		2.9	2.9	3.1	5.5	2.4
ENE	.5	1.5	.5	.2	.0	.0	79	2.6	8.7		3.9	1.5	2.2	1.9	1.5
E	.8	2.8	1.7	.4	*	.0	171	5.7	10.7		5.5	6.3	6.0	3.9	7.0
ESE	.3	1.5	1.8	.4	*	.0	122	4.1	12.4		4.2	3.9	5.1	4.2	3.5
SE	.6	2.5	2.1	.5	.0	.0	170	5.7	11.0		4.2	5.8	5.6	4.8	6.3
SSE	.5	1.9	2.4	.7	.1	.0	166	5.5	13.2		5.6	3.9	4.2	6.5	6.8
S	.6	3.1	4.2	1.5	.1	.0	287	9.5	14.2		9.1	5.3	11.3	10.3	9.2
SSW	.3	2.1	3.6	1.2	*	.0	217	7.2	15.0		8.8	6.8	7.6	3.2	7.4
SW	.8	4.1	5.7	1.6	.1	.0	367	12.2	13.3		11.2	16.0	10.9	13.9	11.8
WSW	.8	3.2	3.9	1.2	.1	.0	280	9.3	13.3		8.5	13.6	9.8	11.0	9.2
W	.9	5.6	5.5	1.4	.1	.0	405	13.5	12.4		14.4	12.6	12.7	10.0	14.4
WNW	.1	1.6	1.8	.5	.1	.0	124	4.1	13.3		3.6	4.9	5.3	7.4	4.8
NW	.9	2.0	2.2	.3	*	.0	163	5.4	10.7		4.5	10.7	5.8	5.9	4.4
NNW	.3	1.1	1.0	.1	.0	.0	74	2.5	10.9		3.2	1.9	1.8	2.9	2.8
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0		.0	.0	.0	.0	.0
CALM	3.4	1131	1186	307	20	0	103	3.4	11.9		3.4	.5	2.7	3.9	2.8
TOT OBS	362	37.6	39.5	10.2	20	0	3006	100.0			696	206	450	310	459
TOT PCT	12.0	37.6	39.5	10.2	20	0	3006	100.0			100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD			00	03	06	09	12
N	2.3	3.2	.6	*	.0	183	6.1	9.4			7.3	3.4	6.0	6.8	5.9
NE	2.5	2.5	.7	.1	.0	174	5.8	9.4			6.8	4.4	5.3	7.4	3.9
E	2.7	5.1	1.6	.4	.0	293	9.7	11.4			9.6	10.2	11.1	8.1	10.5
SE	3.0	5.7	1.9	.6	.0	336	11.2	12.1			9.8	9.7	9.8	11.3	13.1
S	3.1	7.3	5.2	1.2	.0	504	16.8	14.6			17.8	12.1	18.9	13.5	16.6
SW	4.5	10.6	5.7	.7	*	647	21.5	13.3			19.7	29.6	20.7	24.8	20.9
W	4.0	9.2	3.7	.7	.0	529	17.6	12.6			18.0	17.5	18.0	17.4	19.2
NW	2.6	3.7	1.5	*	.0	237	7.9	10.7			7.6	12.6	7.6	6.8	7.2
VAR	.0	.0	.0	.0	.0	0	.0	.0			.0	.0	.0	.0	.0
CALM	3.4	1419	625	112	2	103	3.4	.0			3.4	.5	2.7	3.9	2.8
TOT OBS	848	47.2	20.8	3.7	2	3006	100.0	11.9			696	206	450	310	459
TOT PCT	28.2	47.2	20.8	3.7	2	3006	100.0	11.9			100.0	100.0	100.0	100.0	100.0

JULY

PERIOD: (PRIMARY) 1934-1969  
(OVER-ALL) 1899-1969

AREA 0009 ADAK  
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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	1-3	4-10	11-21	WIND SPEED (KNOTS)			CALM	MEAN	PCT FREQ	TOTAL OBS
				22-33	34-47	48+				
00003	9.0	38.2	38.7	10.3	1.0	.0	2.8	11.9	100.0	902
06009	8.3	39.2	38.7	10.0	.7	.0	3.2	11.9	100.0	760
12015	7.2	35.4	44.3	10.3	.5	.0	2.3	12.7	100.0	610
18021	9.7	37.1	37.2	10.2	.4	.0	5.4	11.3	100.0	734
TOT	259	1131	1186	307	20	0	103	11.9		3006
PCT	8.6	37.6	39.5	10.2	.7	.0	3.4		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & JBSCD	TOTAL OBS	MEAN CLOUD COVER
N	.2	.1	.6	3.3	66	7.4
NNE	.1	.0	.3	1.3	26	7.4
NE	.1	.0	.3	2.5	45	7.5
ENE	.0	.2	.3	2.7	51	7.7
E	.1	.0	.5	5.6	97	7.8
ESE	.0	.0	.4	4.5	77	7.9
SE	.0	.0	.9	5.0	93	7.8
SSE	.1	.1	1.3	4.3	92	7.4
S	.1	.3	1.3	9.3	172	7.7
SSW	.2	.1	.9	6.6	123	7.6
SW	.1	.3	1.7	8.8	171	7.6
WSW	.3	.0	1.3	7.0	135	7.6
W	.2	.4	1.3	11.4	211	7.6
WNW	.2	.2	.8	3.1	68	7.3
NW	.1	.1	.9	3.6	76	7.5
NNW	.2	.1	.5	2.1	46	7.2
VAR	.0	.0	.0	.0	0	.0
CALM	.1	.1	.3	1.8	35	7.6
TOT OBS	30	28	215	1311	1584	7.6
TOT PCT	1.9	1.8	13.6	82.8	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.4	.0	.2	.6	1.1	.9	.2	.1	.0	.1	.6	66
NNE	.4	.1	.0	.2	.2	.2	.4	.1	.0	.1	.1	26
NE	.5	.1	.1	.6	.6	.6	.1	.0	.0	.0	.3	45
ENE	.8	.0	.1	.3	.6	.9	.1	.0	.0	.0	.4	51
E	1.8	.1	.4	.9	1.5	.8	.3	.0	.0	.0	.3	97
ESE	1.3	.3	.6	.5	1.1	.8	.1	.0	.0	.0	.1	77
SE	1.5	.6	.5	1.0	1.0	.8	.2	.1	.0	.0	.3	93
SSE	1.6	.1	.4	.7	1.3	.9	.1	.0	.1	.0	.6	92
S	4.4	.3	.7	1.6	2.1	.8	.1	.0	.1	.1	.8	172
SSW	2.5	.3	.4	1.5	1.5	.7	.2	.0	.1	.0	.8	123
SW	2.9	.2	1.2	2.0	2.0	1.3	.3	.1	.0	.0	.9	171
WSW	2.3	.1	.4	1.6	1.8	.6	.3	.0	.0	.4	1.0	135
W	2.5	.3	.9	3.0	3.1	1.1	.6	.2	.1	.0	1.5	211
WNW	.6	.0	.4	.6	1.0	.8	.3	.0	.0	.0	.6	68
NW	.8	.0	.3	1.0	1.2	.9	.1	.0	.0	.0	.5	76
NNW	.7	.1	.1	.2	.6	.7	.2	.1	.1	.1	.3	46
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.7	.0	.1	.4	.3	.3	.3	.0	.0	.0	.3	35
TOT OBS	404	37	110	264	332	207	59	9	5	10	147	1584
TOT PCT	25.5	2.3	6.9	16.7	21.0	13.1	3.7	.6	.3	.6	9.3	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)				= OR			
	>10	>5	>2	>1	>1 1/2	>1 3/4	>50YD	>0
= OR >6500	5	7	.8	.9	.9	.9	.9	.9
= OR >5000	.7	1.2	1.4	1.4	1.5	1.5	1.5	1.5
= OR >3500	2.7	4.9	5.2	5.3	5.4	5.4	5.4	5.4
= OR >2000	9.0	15.7	17.6	18.3	18.4	18.6	18.6	18.6
= OR >1000	17.5	31.5	36.6	38.7	38.9	39.6	39.6	39.6
= OR >600	22.5	43.4	51.4	54.3	55.2	56.0	56.2	56.2
= OR >300	23.3	46.8	56.3	60.1	61.6	62.7	63.1	63.1
= OR >150	23.4	47.4	57.5	62.0	63.8	65.0	65.4	65.4
= OR > 0	24.0	50.2	62.4	69.5	75.6	82.7	89.9	90.7
TOTAL	381	797	94	1103	1199	1313	1426	1440

TOTAL NUMBER OF OBS: 1587

PCT FREQ NH <5/8: 9.3

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
1960-1969	1.6	2.7	3.2	1.7	2.3	2.3	7.7	8.8	52.6	17.2	2025

JULY

PERIOD: (PRIMARY) 1934-1969  
(OVER-ALL) 1899-1969

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.0	*	.1	*	.2	.3	.1	.2	.3	*	.2	.1	.1	.0	.0	.0	.0	.0	.39	1.9
NO PCP	.2	.3	.1	.2	.9	.6	1.2	1.0	1.7	1.1	2.1	1.1	1.5	.5	.8	.6	.0	.7	309	14.7
TOTAL	5	7	4	5	23	19	27	26	42	25	50	27	34	11	17	12	0	14	348	16.6
PCP	.0	.0	.1	*	.1	.1	.2	.3	.3	.1	.2	.2	.1	.0	.0	.0	.0	.1	.43	2.1
NO PCP	.1	*	.1	.2	.4	.2	.3	.3	.9	.5	.8	1.0	.5	.2	.1	.1	.0	.1	126	6.0
TOTAL	2	1	5	6	11	7	11	12	26	14	21	25	13	5	3	2	0	5	169	8.1
PCP	.0	.1	*	.1	.4	.3	.4	.1	.3	.4	.2	.1	.4	.2	.0	*	.0	*	.67	3.2
NO PCP	.1	*	.3	.3	.4	.1	.6	.3	.7	.4	1.1	.7	1.2	.3	.5	.2	.0	.2	156	7.4
TOTAL	2	4	7	9	18	9	20	9	20	16	27	18	33	11	10	5	0	5	223	10.6
PCP	.1	.0	.1	.2	.3	.5	.3	.2	.5	.5	1.0	.4	.5	*	.1	.0	.0	.1	101	4.8
NO PCP	.3	.1	.3	.2	.5	.6	.4	.4	.9	.8	1.2	.9	1.5	.3	.7	.1	.0	*	195	9.3
TOTAL	8	2	9	9	18	23	16	13	29	27	45	27	41	7	16	3	0	3	296	14.1
PCP	.1	*	.1	.2	.3	.3	.6	.3	.9	.3	.6	.5	.7	.1	.1	.1	.0	.1	116	5.5
NO PCP	1.0	.5	.5	.5	1.5	.5	1.1	1.0	1.5	1.5	2.4	2.0	4.0	1.1	.8	.8	.0	.5	444	21.2
TOTAL	23	11	14	15	37	17	35	27	51	39	62	52	98	27	20	19	0	13	560	26.7
PCP	*	*	*	.0	.0	.0	.0	.1	.1	.2	.1	.2	.2	*	.0	.0	.0	*	25	1.2
NO PCP	1.6	.5	.9	.6	1.1	1.0	1.1	1.3	2.1	1.1	1.7	1.4	4.0	1.2	1.6	.8	.0	.7	476	22.7
TOTAL	34	12	19	13	24	21	23	29	46	28	38	35	87	26	34	16	0	16	501	23.9
TOTAL	74	37	58	57	131	96	132	116	214	149	243	184	306	87	100	57	0	56	2097	100.0
PCT	3.5	1.8	2.8	2.7	6.2	4.6	6.3	5.5	10.2	7.1	11.6	8.8	14.6	4.1	4.8	2.7	.0	2.7	100.0	



JULY

PERIOD: (PRIMARY) 1934-1969  
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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.1	.0	*	*	*	.2	.1	.1	*	.1	.1	.1	*	.1	.1	.0	.5	46	1.6
	4-10	.1	.1	.1	.1	.6	.2	.2	.3	.4	.3	.8	.3	.7	.2	.3	.2	.0		145	5.0
	11-21	.1	*	.1	*	.1	.4	.4	.3	1.0	.6	.6	.5	.5	.3	.1	.2	.0		162	5.5
	22+	.0	.0	.0	.0	.1	.0	.1	.1	.2	.2	.2	*	.1	.0	.0	.0	.0		30	1.0
	TOTAL	5	7	4	6	24	19	27	26	51	31	51	29	42	16	17	13	0	15	383	13.1
1/2<1	0-3	.0	.0	.1	*	.0	.0	.0	.0	*	*	*	*	.0	.0	.0	*	.0	.2	14	.5
	4-10	*	.1	.1	.1	.2	.1	.2	.1	.3	.2	.2	.3	.4	.1	.0	*	.0		70	2.4
	11-21	*	.0	.1	.1	.1	.1	.1	.2	.4	.2	.4	.3	.1	.1	.1	.0	.0		69	2.4
	22+	.0	.0	*	.1	.1	*	*	.1	.2	.1	.2	.2	.0	*	*	.0	.0	6	34	1.2
	TOTAL	2	2	7	7	12	7	11	12	28	17	23	27	15	6	3	2	0		187	6.4
1<2	0-3	.0	.1	.0	.1	*	.1	.1	.0	*	.0	.1	.1	.1	.0	.1	.0	.0	.7	42	1.4
	4-10	.2	.1	.2	.2	.4	.2	.2	.1	.2	.3	.2	.3	.6	.2	*	*	.0		102	3.5
	11-21	.0	*	.0	.1	.1	*	.3	.1	.2	.2	.5	.3	.5	.2	.2	.1	.0		87	3.0
	22+	.0	.0	.1	.1	.1	.1	.1	.1	.2	.1	.1	.1	.1	*	*	*	.0		36	1.2
	TOTAL	6	8	7	10	18	11	22	10	21	17	28	21	39	13	11	5	0	20	267	9.1
2<5	0-3	.1	*	.1	.1	.1	.1	.1	*	.2	*	.1	*	.2	.0	.1	.0	.0	.4	48	1.6
	4-10	.2	.2	.2	.3	.2	.3	.2	.2	.3	.2	.5	.5	.7	.1	.2	.1	.0		125	4.3
	11-21	.2	.1	.1	.1	.4	.6	.3	.2	.4	.6	.8	.5	.6	.1	.4	*	.0		158	5.4
	22+	.0	.0	*	*	.1	.1	.1	.2	.4	.3	.4	.2	.2	.2	*	.0	.0		65	2.2
	TOTAL	15	8	14	13	22	32	19	21	36	32	51	36	51	11	20	3	0	12	396	13.5
5<10	0-3	.1	*	.1	.1	.3	.1	.1	.2	.1	*	.3	.2	.2	.1	.4	*	.0	.9	99	3.4
	4-10	.5	.3	.3	.5	.8	.4	.8	.4	1.0	.6	1.6	.9	1.3	.6	.4	.4	.0		319	10.9
	11-21	.5	.1	.3	.1	.7	.2	.4	.9	1.0	1.0	2.2	1.1	2.2	.4	.9	.4	.0		361	12.3
	22+	*	.0	.0	*	.1	.1	.2	.1	.5	.3	.2	.5	.7	.2	*	*	.0		94	3.2
	TOTAL	33	15	18	23	57	24	45	48	76	58	126	82	129	37	51	24	0	27	873	29.8
10+	0-3	.2	*	.3	.1	.2	.1	*	.1	.1	.2	.1	.3	.4	.0	.2	.1	.0	.8	98	3.4
	4-10	1.0	.4	.6	.3	.6	.4	.8	.7	1.0	.4	.9	.8	1.9	.4	1.0	.5	.0		344	11.8
	11-21	.4	.3	.6	.1	.3	.4	.4	.6	1.2	.8	1.1	1.2	1.5	.8	.6	.2	.0		316	10.8
	22+	*	*	.0	*	.0	*	.0	.1	.2	.3	.5	.3	.3	.1	.2	*	.0		61	2.1
	TOTAL	50	25	44	19	36	27	55	44	72	50	75	75	120	39	60	23	0	22	819	28.0
	TOTAL	111	65	94	78	169	120	159	161	284	205	354	270	396	122	162	73	0	102	2925	100.0
	PCT	3.8	2.2	3.2	2.7	5.8	4.1	5.4	5.5	9.7	7.0	12.1	9.2	13.5	4.2	5.5	2.5	.0	3.5	100.0	

JULY

PERIOD: (PRIMARY) 1934-1969  
(OVER-ALL) 1899-1969

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET,NH >4/8),AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL ANY HGT	NH <5/8 TOTAL OBS
00003	22.4	1.5	6.9	13.8	17.2	15.5	3.7	1.1	.6	.6	83.4	16.6 464
06009	20.8	3.0	5.8	15.9	21.0	12.1	4.9	.2	.0	.5	84.3	15.7 428
12015	26.8	1.8	6.5	15.4	20.3	13.5	3.1	.0	.0	.5	89.1	10.9 384
18021	27.2	2.5	6.9	17.4	21.3	8.8	2.9	.7	.5	.7	89.0	11.0 408
TOT	407	37	110	266	335	212	62	9	5	10	1453	231 1684
PCT	24.2	2.2	6.5	15.8	19.9	12.6	3.7	.5	.3	.6	86.3	13.7 100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	14.5	7.0	6.8	12.6	24.5	34.6	428
06009	14.6	4.8	6.5	11.1	30.7	32.2	397
12015	15.3	5.9	8.3	13.7	31.1	25.7	373
18021	17.5	7.2	7.2	13.1	28.8	26.2	389
TOT	245	99	114	200	455	474	1587
PCT	15.4	6.2	7.2	12.6	28.7	29.9	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET,NH >4/8),BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	1000+ <5 AND5+	NH <5/8 AND 5+	TOTAL OBS
00003	23.8	33.9	55.6	34.3	10.0 428
06009	22.9	34.8	56.9	34.5	8.6 397
12015	26.8	38.3	63.0	28.2	8.8 373
18021	28.5	41.1	66.1	28.3	5.7 389
TOT	404	586	956	499	132 1587
PCT	25.5	36.9	60.2	31.4	8.3 100.0

JULY

PERIOD: (PRIMARY) 1934-1969  
(OVER-ALL) 1809-1969

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TABLE 13

TEMP F	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP								TOTAL OBS	PCT FREQ
	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100		
65/69	.0	.0	.0	.0	.1	.2	.2	.0	8	.4
60/64	.0	.0	.0	.0	.2	.6	.3	.0	20	1.0
55/59	.0	.0	.0	.2	.1	1.2	2.8	1.2	108	5.4
50/54	.0	.0	.0	.0	.5	1.9	10.4	12.3	496	25.0
45/49	.0	.0	.0	.0	.1	3.5	14.7	39.1	1137	57.4
40/44	.0	.0	.0	.0	.0	.2	1.0	9.4	211	10.6
35/39	.0	.0	.0	.0	.0	.0	.0	.1	2	.1
TOTAL	0	0	0	3	18	151	580	1230	1982	100.0
PCT	.0	.0	.0	.2	.9	7.6	29.3	62.1		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP										
N	NE	E	SE	S	SW	W	NW	VAR	CALM	
.0	.1	.0	.0	.1	.2	.1	.1	.0	.0	
.1	.1	.1	.0	.2	.2	.5	.0	.0	.1	
.6	.2	.3	.6	.9	.9	1.1	.3	.0	.6	
1.2	1.3	2.0	2.3	5.5	6.8	2.9	1.5	.0	1.5	
3.8	3.3	6.2	7.6	9.1	11.9	9.3	4.3	.0	1.9	
.6	.5	.6	.9	1.9	2.2	2.4	1.4	.0	.3	
.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	
123	107	181	226	349	437	323	150	0	86	
6.2	5.4	9.1	11.4	17.6	22.0	16.3	7.6	.0	4.3	

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR										
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS	
00003	66	60	57	49	44	42	40	49.2	896	
06009	66	62	55	48	44	42	38	48.6	767	
12015	63	56	52	46	43	41	39	47.1	619	
18021	66	58	54	47	43	41	39	47.6	733	
TOT	66	60	55	48	43	41	38	48.2	3015	

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR										
HOUR (GMT)	0-29	30-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS		
00003	.0	.3	1.4	12.3	38.2	47.8	88	586		
06009	.0	.2	.9	7.9	29.9	61.2	91	546		
12015	.0	.0	.9	3.7	17.7	77.7	93	328		
18021	.0	.0	.6	4.5	25.5	69.5	92	537		
TOT	0	3	19	151	582	1242	91	1997		

PERIOD: (PRIMARY) 1934-1969  
(OVER-ALL) 1899-1969

JULY

AREA 0009 ADAK  
51-55N 172-180W

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	37	41	45	49	53	57	61	TOT	M FOG	WD FOG
17/19	.0	.0	.0	.0	.1	.1	.2	5	.1	.2
14/16	.0	.0	.0	.0	.1	.3	.0	7	.1	.3
11/13	.0	.0	.0	.2	1.4	.4	.0	33	.6	1.4
9/10	.0	.1	1.4	.8	.4	.4	.0	45	1.2	1.4
7/8	.0	.0	1.2	2.5	.6	.1	.0	75	1.5	2.9
6	.0	.0	.9	1.2	.2	.0	.0	40	1.2	1.2
5	.0	.1	1.9	2.6	.7	.0	.0	92	2.2	3.2
4	.0	.4	3.8	3.6	.5	.0	.0	142	3.0	5.3
3	.0	.6	4.1	2.2	.1	.0	.0	118	2.4	4.6
2	.0	.6	10.9	2.4	.2	.0	.0	242	4.6	9.6
1	.0	1.5	5.3	2.2	.1	.0	.0	155	2.7	6.4
0	.2	3.0	14.9	3.2	.1	.0	.0	365	5.3	16.1
-1	.0	1.6	4.4	1.1	.0	.0	.0	121	2.1	5.1
-2	.0	2.3	4.3	.6	.0	.0	.0	122	1.7	5.5
-3	.1	1.4	1.9	.1	.0	.0	.0	57	1.0	2.4
-4	.1	.8	1.2	.0	.0	.0	.0	35	.8	1.3
-5	.1	.6	.6	.1	.0	.0	.0	22	.2	1.1
-6	.0	.1	.2	.1	.0	.0	.0	8	.1	.4
-7/-8	.2	.1	.3	.0	.0	.0	.0	10	.2	.4
-9/-10	.0	.1	.1	.0	.0	.0	.0	4	.0	.2
-11/-13	.0	.2	.0	.0	.0	.0	.0	3	.0	.2
TOTAL	10	227	956	401	84	20	3	1701	525	1176
PCT	.6	13.3	56.2	23.6	4.9	1.2	.2	100.0	30.9	69.1

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.0	2.0	.0	.0	.0	.0	9	.0	.7	.0	.0	.0	.0	3
1-2	.0	2.3	2.0	.0	.0	.0	20	.2	1.1	.7	.0	.0	.0	9
3-4	.0	.7	.9	.0	.0	.0	7	.0	.5	.7	.0	.0	.0	5
5-6	.0	.0	.2	.0	.0	.0	1	.0	.0	.5	.0	.0	.0	2
7	.0	.0	.2	.0	.0	.0	1	.0	.0	.0	.0	.0	.0	0
8-9	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.2	.0	.0	1
10-11	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
13-16	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	1	22	15	0	0	0	38	1	10	8	1	0	0	20
PCT	.2	5.0	3.4	.0	.0	.0	8.6	.2	2.3	1.8	.2	.0	.0	4.5

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.7	1.6	.0	.0	.0	.0	10	.0	.5	.0	.0	.0	.0	2
1-2	.0	.9	1.1	.0	.0	.0	9	.0	1.4	.7	.0	.0	.0	9
3-4	.0	.7	2.5	.2	.0	.0	15	.2	.9	1.6	.0	.0	.0	12
5-6	.0	.5	1.1	.5	.0	.0	9	.0	.0	.7	1.1	.0	.0	8
7	.0	.0	.2	.7	.2	.0	5	.0	.0	.0	.5	.0	.0	2
8-9	.0	.0	.2	.5	.0	.0	3	.0	.0	.0	.0	.2	.0	1
10-11	.0	.0	.0	.0	.2	.0	1	.0	.0	.2	.2	.0	.0	2
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
13-16	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	3	16	23	8	2	0	52	1	12	14	8	1	0	36
PCT	.7	3.6	5.2	1.8	.5	.0	11.8	.2	2.7	3.2	1.8	.2	.0	8.2

PERIOD: (PRIMARY)		JULY										AREA 0009		ADAK	
(OVER-ALL)		1963-1969										51-55N		172-180W	
TABLE 18															
PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)															
HGT	1-3	4-10	11-21	S			TOTAL	1-3	4-10	11-21	SW			TOTAL	
				22-33	34-47	48+					22-33	34-47	48+		
<1	.0	1.6	.0	.0	.0	.0	7	.0	.7	.0	.0	.0	.0	3	
1-2	.5	2.0	4.8	.0	.0	.0	32	.0	.7	2.3	.0	.0	.0	13	
3-4	.0	.2	3.4	.7	.0	.0	19	.0	1.8	2.7	.5	.0	.0	22	
5-6	.0	.9	2.0	1.6	.0	.0	20	.0	.7	3.2	1.4	.2	.0	24	
7	.0	.0	2.5	1.6	.0	.0	18	.0	.0	1.1	1.6	.0	.0	12	
8-9	.0	.0	.5	1.4	.2	.0	9	.0	.0	.2	.2	.2	.0	3	
10-11	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.2	.0	.0	1	
13-16	.0	.0	.0	.2	.0	.0	1	.0	.0	.2	.2	.0	.0	2	
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
26-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
TOTAL	2	21	58	24	1	0	106	0	17	43	18	2	0	80	
PCT	.5	4.8	13.2	5.5	.2	.0	24.1	.0	3.9	9.6	4.1	.5	.0	18.2	
NW															
HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	GRAND TOTAL
<1	.0	1.1	.0	.0	.0	.0	5	.5	2.0	.0	.0	.0	.0	11	50
1-2	.2	2.3	2.7	.0	.0	.0	23	.0	.9	1.4	.0	.0	.0	10	125
3-4	.0	.9	1.6	.2	.0	.0	12	.2	.7	1.8	.0	.0	.0	12	104
5-6	.0	.7	3.2	.7	.0	.0	20	.0	.2	.2	.0	.0	.0	2	86
7	.0	.0	.5	.0	.2	.0	3	.0	.0	.0	.0	.0	.0	0	41
8-9	.0	.0	.5	.9	.0	.0	6	.0	.0	.0	.0	.0	.0	0	23
10-11	.0	.0	.2	.2	.0	.0	2	.0	.0	.0	.0	.0	.0	0	5
12	.0	.0	.0	.5	.0	.0	2	.0	.0	.0	.0	.0	.0	0	3
13-16	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	3
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
TOTAL	1	22	38	11	1	0	73	.3	17	15	.0	.0	.0	35	440
PCT	.2	5.0	8.6	2.5	.2	.0	16.6	.7	3.9	3.4	.0	.0	.0	8.0	100.0

JULY

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1969

AREA 0009 ADAK  
51-55N 172-180W

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)								TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+			
<1	3.5	10.0	.0	.0	.0	.0			61
1-2	1.3	11.3	15.3	.0	.0	.0			126
3-4	.4	6.2	14.8	1.5	.0	.0			104
5-6	.0	2.9	10.8	5.1	.2	.0			86
7	.0	.0	4.4	4.2	.4	.0			41
8-9	.0	.0	1.3	3.1	.7	.0			23
10-11	.0	.0	.4	.4	.2	.0			5
12	.0	.0	.2	.4	.0	.0			3
13-16	.0	.0	.0	.0	.0	.0			0
17-19	.0	.0	.0	.0	.0	.0			0
20-22	.0	.0	.0	.0	.0	.0			0
23-25	.0	.0	.0	.0	.0	.0			0
26-32	.0	.0	.0	.0	.0	.0			0
33-40	.0	.0	.0	.0	.0	.0			0
41-48	.0	.0	.0	.0	.0	.0			0
49-60	.0	.0	.0	.0	.0	.0			0
61-70	.0	.0	.0	.0	.0	.0			0
71-86	.0	.0	.0	.0	.0	.0			0
87+	.0	.0	.0	.0	.0	.0			0
TOTAL	24	137	214	70	1.5	7			452
PCT	5.3	30.3	47.3	15.5	1.5	.0			100.0

TABLE 19

PERIOD (SEC)	PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)																		87+ TOTAL	MEAN HGT	
	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86			
<6	2.0	11.4	14.3	8.6	2.2	.9	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	217	3
6-7	.0	.9	5.7	8.3	3.7	2.6	.6	.4	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	121	5
8-9	.0	.9	3.7	5.0	3.1	2.8	.9	.4	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	92	5
10-11	.0	.0	.2	.7	.6	2.4	.2	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	25	7
12-13	.0	.0	.0	.0	.2	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	11
>13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
INDET	15.8	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	87	0
TOTAL	97	72	130	124	53	47	11	4	7	0	0	0	0	0	0	0	0	0	0	545	3
PCT	17.8	13.2	23.9	22.8	9.7	8.6	2.0	.7	1.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

AUGUST

PERIOD: (PRIMARY) 1934-1969  
(OVER-ALL) 1900-1969

AREA 0009 ADAK  
51-55N 172-180W

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	PRECIPITATION TYPE				HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
			DRZL	FRZG PCPN	FRZG PCPN	SNOW	OTHER FRZN PCPN				FOG WD	SMOKE HAZE	DUST BLWG	NO SIG WEA	
N	.2	.0	.2	.0	.0	.0	.0	.0	9	.0	.5	*	.0	2.6	75
NNE	.2	.0	.2	.0	.0	.0	.0	.0	8	.0	.3	.0	.0	1.5	46
NE	.9	.0	.2	.0	.0	.0	.0	.0	23	.0	.3	*	.0	1.4	60
ENE	.7	.0	.3	.0	.0	.0	.0	.0	21	.0	.3	*	.0	1.3	54
E	.9	.0	.3	.0	.0	.0	.0	.0	25	.0	.9	*	.0	1.8	82
ESE	.5	*	.2	.0	.0	.0	.0	.0	15	.0	1.1	.2	.0	1.5	74
SE	1.3	*	.6	.0	.0	.0	.0	.0	38	.0	1.3	.0	.0	2.0	107
SSE	.9	.0	.5	.0	.0	.0	.0	.0	27	.0	1.7	.2	.0	1.5	98
S	1.6	*	.9	.0	.0	.0	.0	.0	46	.0	4.9	.3	.0	4.0	235
SSW	1.1	.1	1.3	.0	.0	.0	.0	.0	49	.0	3.2	.1	.0	3.4	188
SW	1.1	.1	.8	.0	.0	.0	.0	.0	39	.0	3.2	.5	.0	4.7	213
WSW	.6	.2	.9	.0	.0	.0	.0	.0	35	*	3.2	.3	.0	5.6	227
W	.2	.1	1.0	.0	.0	.0	.0	.1	28	.0	2.6	.3	.0	10.8	312
WNW	.2	.0	.3	.0	.0	.0	.0	.0	10	.0	.7	*	.0	3.7	101
NW	.1	.1	.1	.0	.0	.0	.0	.0	6	.0	.8	.1	.0	2.8	82
NNW	.1	.1	*	.0	.0	.0	.0	.0	6	.0	.9	*	.0	1.7	60
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
CALM	.1	.0	*	.0	.0	.0	.0	.0	3	.0	.9	*	.0	1.4	52
TOT OBS	221	18	167	0	0	0	0	2	388	1	557	53	0	1067	2066
TOT PCT	10.7	.9	8.1	.0	.0	.0	.0	.1	18.8	*	27.0	2.6	.0	51.6	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	PRECIPITATION TYPE				HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
			DRZL	FRZG PCPN	FRZG PCPN	SNOW	OTHER FRZN PCPN				FOG WD	SMOKE HAZE	DUST BLWG	NO SIG WEA	
00003	10.4	1.5	7.2	.0	.0	.0	.0	.2	105	.0	28.1	2.5	.0	51.7	594
06009	12.4	.2	7.1	.0	.0	.0	.0	.0	99	.0	30.3	3.3	.0	47.3	518
12015	6.9	.4	7.3	.0	.0	.0	.0	.0	65	.2	19.3	1.3	.0	64.7	450
18021	12.1	1.1	10.2	.0	.0	.0	.0	.2	119	.0	29.0	3.0	.0	45.4	527
TOT	221	18	167	0	0	0	0	2	388	1	564	54	0	1082	2089
PCT	10.6	.9	8.0	.0	.0	.0	.0	.1	18.6	*	27.0	2.6	.0	51.8	100.0



AUGUST

PERIOD: (PRIMARY) 1934-1969  
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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-3	4-10	11-21	22-33	34-47	48+	TOTAL OBS	PCT FREQ	MEAN SPD		00	03	06	09	12
N	.7	1.8	1.0	.3	.0	.0	108	3.7	9.8		3.2	3.3	3.7	3.9	4.3
NNE	.3	.8	.7	.2	*	.0	58	2.0	11.6		1.7	1.6	2.1	2.4	1.9
NE	.7	1.3	1.0	.4	.1	.0	100	3.5	10.6		3.2	2.2	2.8	5.8	3.4
ENE	.3	.8	1.1	.2	.0	.0	71	2.5	12.4		2.6	1.6	3.9	2.4	2.6
E	.3	1.6	1.2	.4	.0	.0	105	3.6	11.8		2.9	2.7	2.3	3.6	4.8
ESE	.2	1.2	1.3	.3	*	.0	86	3.0	12.8		3.8	2.2	3.5	1.5	2.2
SE	.3	1.8	1.9	.6	.1	.0	139	4.8	12.9		3.9	6.0	4.1	4.5	6.5
SSE	.1	1.9	1.7	.3	.2	.0	119	4.1	13.3		4.1	4.4	5.3	3.3	5.3
S	.8	4.0	4.1	1.7	.1	*	304	10.5	13.5		11.5	12.1	8.5	11.8	8.4
SSW	.2	2.8	4.1	1.6	.1	.0	257	8.9	14.7		8.6	11.5	8.3	9.8	7.9
SW	.8	4.6	5.2	1.2	.1	*	347	12.0	12.8		11.2	13.7	9.9	14.2	11.5
WSW	.7	3.7	5.4	1.6	*	*	329	11.4	13.9		12.7	11.0	11.3	12.4	10.3
W	1.0	5.0	6.7	1.6	*	.0	415	14.4	13.1		14.8	11.5	18.4	10.3	14.4
WNW	.2	1.6	2.6	.4	.0	.0	139	4.8	13.3		4.2	3.8	3.9	3.6	7.5
NW	.6	1.9	1.6	.6	.0	.0	135	4.7	11.3		5.6	5.5	3.7	6.1	3.1
NNW	.2	1.5	1.2	.3	.0	.0	93	3.2	11.8		3.2	4.9	4.1	1.5	2.4
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0		.0	.0	.0	.0	.0
CALM	2.7	10.9	11.74	337	21	3	78	2.7	.0		2.7	1.6	4.1	3.6	3.4
TOT OBS	299	1049	40.7	11.7	.7	.1	2883	100.0	12.6		660	182	434	330	416
TOT PCT	10.4	36.4									100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD			00	03	06	09	12
N	2.2	2.5	.9	.1	.0	166	5.8	10.4			4.8	4.9	5.8	6.4	6.3
NE	2.0	2.5	1.1	.3	.0	171	5.9	11.4			5.8	3.8	6.7	8.2	6.0
E	1.5	3.5	1.5	.1	*	191	6.6	12.3			6.7	4.9	5.8	5.2	7.0
SE	1.9	4.5	2.0	.5	.1	258	8.9	13.1			8.0	10.4	9.4	7.9	11.8
S	3.6	9.4	5.3	1.1	.1	561	19.5	14.0			20.2	23.6	16.8	20.6	16.3
SW	4.6	11.7	6.3	.7	.1	676	23.4	13.3			23.9	24.7	21.2	26.7	21.9
W	3.9	9.4	5.5	.4	.0	554	19.2	13.2			19.1	15.4	22.4	13.9	21.9
NW	2.3	3.8	1.6	.2	.0	228	7.9	11.5			8.8	10.4	7.8	7.6	5.5
VAR	.0	.0	.0	.0	.0	0	.0	.0			.0	.0	.0	.0	.0
CALM	2.7	13.65	694	100	8	78	2.7	.0			2.7	1.6	4.1	3.6	3.4
TOT OBS	716	1365	24.1	3.5	.3	2883	100.0	12.6			660	182	434	330	416
TOT PCT	24.8	47.3									100.0	100.0	100.0	100.0	100.0

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	1-3	4-10	11-21	WIND SPEED (KNOTS)				CALM	MEAN	PCT		TOTAL OBS
				22-33	34-47	48+				FREQ		
00003	7.7	34.6	42.0	12.1	1.0	.1		2.5	12.8	100.0		842
06009	8.1	38.0	38.7	10.5	.7	.1		3.9	12.1	100.0		764
12015	5.1	33.5	43.7	14.3	.6	.2		2.6	13.4	100.0		531
18021	9.0	38.9	39.1	10.6	.7	.0		1.7	12.1	100.0		746
TOT	221	1049	1174	337	21	3		78	12.6			2883
PCT	7.7	36.4	40.7	11.7	.7	.1		2.7		100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

BY WIND DIRECTION

WIND DIR	PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)							TOTAL OBS	MEAN CLOUD COVER
	0-2	3-4	5-7	8	9	10	11		
N	.2	.1	1.3	1.8	53			53	6.9
NNE	.1	.1	.6	1.3	33			33	6.9
NE	.2	.1	.5	2.2	47			47	7.2
ENE	.1	.0	.4	2.0	39			39	7.6
E	.0	.1	.4	3.4	61			61	7.8
ESE	.1	.1	.5	2.5	49			49	7.5
SE	.1	.0	.5	4.4	78			78	7.8
SSE	.0	.1	.3	4.5	77			77	7.8
S	.1	.3	1.5	9.4	177			177	7.6
SSW	.2	.1	1.5	6.9	135			135	7.5
SW	.1	.1	1.9	7.8	153			153	7.7
WSW	.6	.4	1.0	8.6	167			167	7.2
W	.6	1.0	3.3	11.5	254			254	7.2
WNW	.6	.1	.8	4.2	90			90	7.1
NW	.3	.3	.9	2.5	61			61	6.9
NNW	.2	.1	1.3	1.1	43			43	6.6
VAR	.0	.0	.0	.0	0			0	.0
CALM	.1	.2	.3	2.0	39			39	7.3
TOT OBS	53	48	267	1188	1556			1556	7.4
TOT PCT	3.4	3.1	17.2	76.3	100.0				

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)												TOTAL OBS
	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8	ANY HGT	
N	.1	.1	.2	.6	.8	.6	.1	.1	.1	.0	.0	.8	53
NNE	.1	.1	.1	.4	.8	.1	.0	.0	.0	.0	.0	.5	33
NE	.2	.1	.2	.6	1.1	.4	.1	.0	.0	.0	.0	.4	47
ENE	.3	.1	.4	.3	1.0	.2	.0	.0	.0	.0	.0	.3	39
E	.9	.1	.2	.4	1.2	.3	.2	.0	.0	.1	.1	.4	61
ESE	.9	.1	.4	.5	.6	.3	.0	.0	.0	.0	.0	.4	49
SE	1.7	.1	.7	.6	1.1	.3	.1	.0	.1	.0	.0	.3	78
SSE	2.1	.3	.4	.6	.6	.6	.1	.0	.1	.0	.0	.3	77
S	4.3	.3	1.2	1.1	2.0	1.2	.1	.0	.1	.0	.3	1.0	177
SSW	2.5	.2	.6	1.3	2.2	.9	.1	.0	.1	.1	.6	.6	135
SW	2.5	.2	.8	2.2	1.9	1.1	.3	.1	.1	.1	.5	.5	153
WSW	2.8	.4	.6	1.4	2.5	1.2	.3	.1	.0	.1	1.3	.6	167
W	2.8	.3	.4	3.1	3.6	3.2	.2	.2	.0	.0	2.5	.8	254
WNW	.8	.1	.3	1.2	2.2	.5	.0	.0	.0	.0	.8	.8	90
NW	.7	.0	.0	.5	1.2	.3	.3	.0	.0	.0	1.0	.6	61
NNW	.2	.0	.1	.5	.8	.4	.1	.1	.0	.0	.6	.4	43
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.9	.0	.1	.3	.4	.4	.1	.1	.0	.0	.3	.3	39
TOT OBS	368	34	106	243	377	185	31	9	7	11	185	.3	1556
TOT PCT	23.7	2.2	6.8	15.6	24.2	11.9	2.0	.6	.4	.7	11.9	.4	100.0

PERIOD: (PRIMARY) 1934-1969 (OVER-ALL) 1900-1969		AUGUST		AREA 0009 51-55N 172-180W							
TABLE 7											
CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE OF CEILING HEIGHT (NH >4/8) AND VSBY (NM);											
CEILING (FEET)	= OR >10	= OR >5	= OR >2	VSBY (NM)		= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0	
= OR >6500	.6	.9	1.0	1.1	1.1	1.1	1.1	1.1	1.2	1.2	
= OR >5000	1.0	1.5	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	
= OR >3500	2.5	3.4	3.6	3.7	3.7	3.7	3.7	3.7	3.7	3.7	
= OR >2000	9.4	14.0	15.1	15.4	15.4	15.6	15.6	15.6	15.6	15.6	
= OR >1000	21.0	34.3	37.7	39.1	39.4	39.7	39.9	39.9	39.9	39.9	
= OR >800	26.4	45.0	51.4	54.1	54.9	55.3	55.6	55.6	55.6	55.6	
= OR >300	27.5	48.6	56.0	59.9	61.0	62.0	62.4	62.4	62.4	62.4	
= OR >150	27.7	49.7	57.4	61.7	63.0	64.1	64.6	64.6	64.6	64.6	
= OR > 0	28.4	52.2	61.6	67.8	72.6	78.8	87.4	88.0	88.0	88.0	
TOTAL	441	812	958	1055	1129	1225	1359	1359	1359	1369	
TOTAL NUMBER OF OBS: 1555		PCT FREQ NH <5/8: 12.0									

TABLE 7A									
PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)									
0	1	2	3	4	5	6	7	8	TOTAL
2.1	2.3	3.4	2.5	2.1	2.7	8.2	11.3	48.6	1845
									03SCD OBS

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSH	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.1	*	*	.0	.0	.1	.1	.2	.3	.5	.1	.1	.2	.1	*	.0	.0	.0	.47	2.3
NO PCP	.2	.3	.1	*	.3	.5	.8	1.1	2.8	1.8	1.2	1.6	1.0	.4	.4	.1	.0	.8	276	13.5
TOTAL	8	7	3	1	7	13	19	27	65	47	27	34	26	11	9	3	0	16	323	15.7
PCP	.0	.0	*	.1	.1	.1	.4	.1	.1	.5	.2	.2	*	.0	.0	.1	.0	.0	.44	2.1
NO PCP	*	*	.1	*	.1	.1	.1	.4	.9	.3	.7	.6	.7	.1	.2	.2	.0	.1	101	4.9
TOTAL	1	1	4	4	5	5	11	10	21	17	19	17	15	2	4	7	0	2	145	7.1
PCP	.1	.0	.4	.2	.4	.1	.1	.2	.4	.3	.5	.2	.3	*	*	.0	.0	*	72	3.5
NO PCP	.1	.0	*	.1	*	*	.2	.1	.6	1.0	.9	.6	.8	.2	.1	.1	.0	.1	105	5.1
TOTAL	5	0	9	7	9	3	6	8	20	27	28	18	22	6	4	2	0	3	177	8.6
PCP	.0	.2	.4	.2	.3	.1	.5	.3	.4	.4	.5	.4	.5	.1	*	.0	.0	.0	92	4.5
NO PCP	.1	.1	.1	.1	.4	.3	.4	.4	.9	.8	1.2	1.0	1.3	.2	.2	.2	.0	*	163	7.9
TOTAL	3	6	11	8	14	9	19	15	28	25	34	30	36	6	5	5	0	1	255	12.4
PCP	.1	*	.1	.2	.4	.2	.4	.3	.6	.5	.4	.4	.1	.2	.1	*	.0	.1	93	4.5
NO PCP	.8	.7	.2	.4	.9	.7	.9	.7	2.0	1.4	2.0	2.8	4.9	1.1	.8	.7	.0	.6	445	21.7
TOTAL	19	15	8	13	27	20	28	22	54	39	49	66	103	27	18	16	0	14	538	26.2
PCP	.0	*	.1	.1	*	*	.2	.1	.1	.1	.2	.2	.1	.0	*	.1	.0	.0	36	1.8
NO PCP	1.9	.7	1.1	.9	.9	1.1	.9	.6	2.0	1.3	2.5	2.6	5.2	2.4	2.0	1.2	.0	.8	577	28.1
TOTAL	39	16	25	21	19	23	23	15	44	30	56	58	110	49	42	27	0	16	613	29.9
TOTAL	75	45	60	54	81	73	106	97	232	185	213	223	312	101	82	60	0	52	2051	100.0
PCT	3.7	2.2	2.9	2.6	3.9	3.6	5.2	4.7	11.3	9.0	10.4	10.9	15.2	4.9	4.0	2.9	.0	2.5	100.0	

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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.1	.1	*	*	*	.1	.1	*	.1	*	.1	.1	.1	*	.1	.0	.0	.6	48	1.7
	4-10	.1	.2	.1	.0	.2	.4	.3	.4	1.0	.6	.4	.6	.5	.1	.3	.1	.0		143	5.1
	11-21	.1	.0	.0	.0	.1	.3	.2	.3	.8	.7	.5	.5	.3	.2	.0	.0	.0		106	3.8
	22+	.0	.0	.0	.0	.0	.2	.2	.2	.4	.4	*	*	.0	*	*	.0	.0		38	1.4
	TOTAL	8	7	3	1	8	14	21	27	66	49	29	35	26	11	10	4	0	16	335	12.0
1/2<1	0-3	.0	.0	*	.0	.1	.0	*	.0	*	*	*	.1	.1	*	.0	*	.0	.1	16	.6
	4-10	*	.0	.1	.1	.2	.0	.1	.2	.4	.1	.3	.3	.1	.0	*	*	.0		53	1.9
	11-21	.0	.0	.0	.1	.0	.1	.1	.2	.3	.3	.4	.3	.3	*	.1	.1	.0		61	2.2
	22+	.0	*	*	.0	.0	*	.1	.0	.1	.3	.1	*	*	.0	.1	.1	.0		30	1.1
	TOTAL	1	1	4	.4	7	5	11	10	24	19	22	18	16	2	6	7	0	3	160	5.7
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	*	.0	.0	.1	*	.0	.0	.0	.0	.0	.3	12	.4
	4-10	.0	.0	.1	*	.1	.0	.1	.1	.1	.2	.5	.3	.3	.1	*	*	.0		58	2.1
	11-21	.1	.0	.1	.2	.1	.1	.1	.1	.3	.5	.3	.4	.4	.1	.1	*	.0		82	2.9
	22+	.1	.0	.1	*	*	*	.0	*	.5	.3	.1	.1	.2	*	*	.0	.0		44	1.6
	TOTAL	5	0	9	7	9	3	6	8	25	29	28	22	24	7	5	2	0	7	196	7.0
2<5	0-3	.1	.0	.3	.1	.0	.0	.0	.0	.1	.1	.2	.1	.1	*	.0	.0	.0	.2	39	1.4
	4-10	.0	*	*	.1	.3	.1	.4	*	.3	.3	.4	.3	.4	.2	.0	.1	.0		80	2.9
	11-21	*	.1	.2	.1	.1	.2	.3	.3	.6	.6	.6	.7	.7	.1	.1	.1	.0		132	4.7
	22+	.0	.1	.2	.1	.2	*	.1	.2	.3	.2	.4	.3	.3	.1	.1	*	.0		74	2.6
	TOTAL	5	6	19	10	16	10	22	15	33	31	46	38	42	12	6	8	0	6	325	11.6
5<10	0-3	.1	.1	.2	.1	.2	.1	*	.1	.3	*	*	.3	.3	*	.1	*	.0	.6	68	2.4
	4-10	.5	.1	.2	.3	.3	.3	.5	.7	.8	.7	1.3	.8	1.6	.4	.5	.4	.0		267	9.5
	11-21	.3	.4	*	.2	.6	.3	.7	.3	1.4	1.0	2.0	2.1	2.4	.8	.7	.5	.0		386	13.8
	22+	.2	.1	.1	.1	.2	.1	.2	*	.3	.4	.4	.6	.7	.1	.1	*	.0		101	3.6
	TOTAL	31	19	14	18	37	22	42	32	78	60	106	106	140	37	37	25	0	18	822	29.4
10+	0-3	.4	.1	.1	.1	*	.0	.2	.0	.1	.1	.4	.2	.4	.1	.4	.1	.0	1.0	104	3.7
	4-10	1.1	.5	.8	.4	.6	.5	.4	.4	1.3	.8	1.9	1.5	2.3	.8	1.1	.8	.0		420	15.0
	11-21	.5	.3	.7	.4	.3	.4	.5	.4	.9	1.0	1.4	1.4	2.7	1.4	.7	.5	.0		371	13.3
	22+	.1	.0	*	*	*	*	*	*	.1	.1	.3	.6	.5	.2	.2	.1	.0		67	2.4
	TOTAL	57	24	46	25	26	28	32	23	69	54	110	101	164	69	65	42	0	27	962	34.4
TOTAL		107	57	95	65	103	82	134	115	295	242	341	320	412	138	129	88	0	77	2800	100.0
PCT		3.8	2.0	3.4	2.3	3.7	2.9	4.8	4.1	10.5	8.6	12.2	11.4	14.7	4.9	4.6	3.1	.0	2.8	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET,NH >4/8),AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	21.3	2.3	6.2	12.6	22.5	11.6	2.7	.4	.8	1.0	81.4	18.6	484
06009	21.9	2.3	6.4	15.5	23.7	12.4	1.8	.5	.3	.0	84.8	15.2	388
12015	25.5	.6	6.0	13.8	25.8	10.5	1.8	.9	.3	.6	85.9	14.1	333
18021	24.1	3.0	7.7	19.4	22.9	11.7	1.2	.5	.2	1.0	91.8	8.2	402
TOT	370	34	106	245	379	186	31	9	7	11	1378	229	1607
PCT	23.0	2.1	6.6	15.2	23.6	11.6	1.9	.6	.4	.7	85.7	14.3	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	15.9	4.3	5.9	7.0	25.2	41.7	460
06009	15.4	3.8	6.2	9.2	27.8	37.6	370
12015	13.6	6.1	7.0	12.7	24.8	35.8	330
18021	17.5	5.3	6.8	11.4	26.8	32.2	395
TOT	244	75	100	153	407	576	1555
PCT	15.7	4.8	6.4	9.8	26.2	37.0	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET,NH >4/8),BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND5+	NH <5/8 AND 5+	TOTAL OBS
00003	22.2	33.5	49.8	36.5	13.7	460
06009	23.5	33.0	54.1	34.9	11.1	370
12015	24.8	32.7	54.2	32.7	13.0	330
18021	24.6	37.7	61.5	32.4	6.1	395
TOT	368	533	851	533	171	1555
PCT	23.7	34.3	54.7	34.3	11.0	100.0

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TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
65/69	.0	.0	.0	.0	.0	*	.1	.1	6	.3
60/64	.0	.0	.0	.0	.2	.1	.5	.5	29	1.4
55/59	.0	.0	*	.1	.2	1.1	3.2	4.1	188	8.8
50/54	.0	.0	.0	.0	.4	1.6	13.9	25.5	886	41.4
45/49	.0	.0	.0	.0	*	1.9	12.3	32.6	1002	46.9
40/44	.0	.0	.0	.0	.0	.0	.1	1.1	27	1.3
TOTAL	0	0	1	3	19	103	644	1368	2138	100.0
PCT	.0	.0	*	.1	.9	4.8	30.1	64.0		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
65/69	.0	.0	.0	.0	.2	*	.0	.0	.0	*
60/64	.1	.0	*	.2	.2	.2	.2	.3	.0	.1
55/59	.2	.4	.3	.7	2.1	2.2	2.0	.3	.0	.6
50/54	1.9	1.8	2.2	4.5	9.1	11.2	6.8	2.5	.0	1.4
45/49	3.6	3.8	3.2	3.6	7.2	10.0	10.0	4.7	.0	.9
40/44	.1	.2	.2	.0	.1	.2	.2	.1	.0	.0
TOTAL	129	133	128	193	401	510	409	169	0	66
PCT	6.0	6.2	6.0	9.0	18.8	23.9	19.1	7.9	.0	3.1

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00Z03	66	61	57	51	46	45	41	51.1	846
06Z09	67	62	57	50	46	44	41	50.6	764
12Z15	59	55	54	48	45	44	41	48.8	537
18Z21	66	58	55	49	45	44	40	49.5	747
TOT	67	60	56	50	45	44	40	50.1	2894

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00Z03	.0	.3	1.6	5.7	36.3	56.1	90	628
06Z09	.0	.2	1.0	4.8	32.0	62.1	91	609
12Z15	.0	.0	.3	5.3	23.5	70.8	93	319
18Z21	.0	.2	.5	3.5	25.4	70.4	92	594
TOT	0	4	20	103	649	1374	92	2150

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	37	41	45	49	53	57	61	65	TOT	W FOG	WD FOG
	40	44	48	52	56	60	64	68			
17/19	.0	.0	.0	.0	.0	.1	.0	.0	2	.0	.1
14/16	.0	.0	.0	.0	.2	.1	.1	.0	6	.1	.2
11/13	.0	.0	.0	.1	.5	.3	.1	.1	19	.3	.8
9/10	.0	.0	.0	.8	1.2	.3	.0	.0	41	.7	1.6
7/8	.0	.0	.2	3.8	1.1	.3	.0	.0	96	2.0	3.4
6	.0	.0	1.3	1.9	.6	.3	.0	.0	73	1.6	2.5
5	.0	.0	2.4	2.8	1.6	.3	.0	.0	126	2.5	4.6
4	.0	.1	2.4	3.7	2.0	.3	.0	.0	150	2.8	5.6
3	.0	.0	2.9	2.9	1.2	.1	.0	.0	125	2.1	4.9
2	.0	.2	4.2	5.6	2.3	.1	.0	.0	219	3.1	9.2
1	.0	.1	4.9	3.9	.7	.1	.0	.0	171	2.4	7.3
0	.0	.5	8.6	7.2	1.1	.0	.0	.0	307	3.7	13.6
-1	.0	.3	4.3	3.4	.2	.0	.0	.0	147	1.2	7.0
-2	.1	.0	3.6	1.9	.2	.0	.0	.0	102	1.4	4.4
-3	.0	.2	3.0	1.3	.1	.0	.0	.0	81	1.0	3.6
-4	.0	.3	1.9	.7	.1	.0	.0	.0	52	.6	2.3
-5	.0	.3	1.1	.5	.1	.0	.0	.0	34	.6	1.4
-6	.0	.1	.4	.2	.0	.0	.0	.0	13	.3	.5
-7/-8	.0	.0	.2	.1	.0	.0	.0	.0	5	.0	.3
-9/-10	.0	.0	.3	.0	.0	.0	.0	.0	5	.1	.2
TOTAL	1	34	738	722	234	40	4	1	1774	469	1305
PCT	.1	1.9	41.6	40.7	13.2	2.3	.2	.1	100.0	26.4	73.6



PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N					NE					48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47		
<1	.0	.7	.0	.0	.0	.0	.2	.0	.0	.0	.0	1
1-2	.2	2.3	.9	.0	.0	.2	1.0	.0	.0	.0	.0	9
3-4	.2	.9	.9	.0	.0	.0	.5	2.3	.3	.0	.0	18
5-6	.0	.7	1.0	.3	.0	.0	.2	1.0	1.0	.0	.0	13
7	.0	.2	.0	.2	.0	.0	.2	.7	.5	.2	.0	9
8-9	.0	.0	.3	.2	.0	.0	.3	.5	.0	.0	.0	3
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
12	.0	.0	.2	.0	.0	.0	.0	.0	.2	.0	.0	1
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	2	27	19	4	0	1	12	28	12	1	0	54
PCT	.3	4.7	3.3	.7	.0	.2	2.1	4.9	2.1	.2	.0	9.4

HGT	E					SE					48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47		
<1	.2	.3	.0	.0	.0	.2	.3	.0	.0	.0	.0	3
1-2	.2	1.4	1.4	.0	.0	.0	1.0	1.2	.0	.0	.0	13
3-4	.0	.7	1.7	.5	.0	.0	.7	1.6	.3	.0	.0	15
5-6	.0	.5	.3	.2	.0	.0	.2	1.6	.0	.0	.0	10
7	.0	.2	.0	.0	.0	.0	.0	.7	.2	.0	.0	5
8-9	.0	.0	.5	.0	.0	.0	.0	.5	.0	.0	.0	3
10-11	.0	.0	.0	.2	.0	.0	.0	.2	.0	.0	.0	1
12	.0	.0	.2	.2	.0	.0	.0	.0	.0	.2	.0	1
13-16	.0	.0	.0	.2	.0	.0	.0	.0	.2	.0	.0	1
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	2	18	24	7	0	1	13	33	4	1	0	52
PCT	.3	3.1	4.2	1.2	.0	.2	2.3	5.7	.7	.2	.0	9.1

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.0	.7	.0	.0	.0	.0	4	.9	.3	.0	.0	.0	.0	7
1-2	.0	3.1	2.6	.0	.0	.0	33	.0	2.1	1.2	.0	.0	.0	19
3-4	.0	.5	2.4	.2	.0	.0	18	.0	.9	3.8	.7	.0	.0	31
5-6	.0	.2	2.4	.9	.0	.0	20	.0	.7	1.2	.3	.0	.0	13
7	.0	.0	1.0	1.4	.2	.0	15	.0	.2	1.7	.2	.0	.0	12
8-9	.0	.0	.0	.5	.0	.2	4	.0	.0	.0	1.0	.0	.0	6
10-11	.0	.0	.3	.5	.0	.0	5	.0	.0	.3	.5	.0	.0	5
12	.0	.0	.0	.2	.3	.0	3	.0	.0	.0	.2	.0	.3	3
13-16	.0	.0	.0	.2	.0	.0	1	.0	.0	.0	.0	.0	.0	0
17-19	.0	.0	.0	.0	.2	.0	1	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	0	26	51	22	4	1	104	5	24	48	17	0	3	96
PCT	.0	4.5	8.9	3.8	.7	.2	18.1	.9	4.2	8.4	3.0	.0	.3	16.7

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	GRAND TOTAL
<1	.0	.9	.0	.0	.0	.0	5	.2	.0	.0	.0	.0	.0	1	28
1-2	.2	4.4	2.4	.0	.0	.0	40	.0	1.6	.3	.0	.0	.0	11	161
3-4	.2	1.0	3.7	.2	.0	.0	29	.2	.3	.5	.0	.0	.0	6	145
5-6	.0	1.0	3.8	.7	.0	.0	32	.0	.0	1.0	.2	.0	.0	7	113
7	.0	.2	1.9	.5	.0	.0	15	.0	.0	.3	.0	.0	.0	2	61
8-9	.0	.0	.5	.5	.0	.0	6	.0	.2	.2	.3	.0	.0	4	32
10-11	.0	.0	.3	.0	.0	.0	2	.0	.0	.0	.2	.0	.0	1	15
12	.0	.0	.0	.5	.0	.0	3	.0	.0	.0	.0	.0	.0	0	14
13-16	.0	.0	.2	.0	.0	.0	1	.0	.0	.0	.0	.0	.0	0	4
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	1
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
TOTAL	2	43	74	14	0	0	133	2	12	14	.0	.0	0	32	574
PCT	.3	7.5	12.9	2.4	.0	.0	23.2	.3	2.1	2.4	.0	.0	.0	5.6	100.0

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TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	3.1	3.4	.0	.0	.0	.0					38
1-2	.9	16.5	10.2	.0	.0	.0					162
3-4	.5	5.6	16.5	2.2	.0	.0					146
5-6	.0	3.4	12.3	3.6	.0	.0					113
7	.2	.9	6.3	2.9	.3	.0					62
8-9	.0	.2	2.6	2.6	.0	.2					32
10-11	.0	.0	1.2	1.4	.0	.0					15
12	.0	.0	.3	1.2	.5	.3					14
13-16	.0	.0	.2	.5	.0	.0					4
17-19	.0	.0	.0	.0	.2	.0					1
20-22	.0	.0	.0	.0	.0	.0					0
23-25	.0	.0	.0	.0	.0	.0					0
26-32	.0	.0	.0	.0	.0	.0					0
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	27	176	291	84	6	3					587
PCT	4.6	30.0	49.6	14.3	1.0	.5					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.5	10.5	14.2	7.7	2.5	1.1	.3	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	248	3
6-7	.0	1.7	5.5	10.3	5.7	3.8	1.1	1.7	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	196	5
8-9	.0	.0	2.9	3.4	4.2	3.4	1.5	.8	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	108	6
10-11	.0	.2	.9	1.1	2.0	1.7	.3	.9	.3	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	43	7
12-13	.0	.0	.0	.0	.0	.2	.2	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	6	11
>13	.0	.2	.0	.3	.3	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	6	6
INDET	5.2	.3	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	37	0
TOTAL	44	83	153	148	96	66	22	26	11	1	0	0	0	0	0	0	0	0	0	650	0
PCT	6.8	12.8	23.5	22.8	14.8	10.2	3.4	4.0	1.7	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	4

SEPTEMBER

PERIOD: (PRIMARY) 1942-1969  
(OVER-ALL) 1900-1969

AREA 0009 ADAK  
51-55N 172-180W

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	PRECIPITATION TYPE				HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
			DRZL	FRZG	SNOW	OTHER					PCPN	FG	SMOKE	DUST	NO SIG	
N	.8	0	.5	.0	.0	.0	.0	.0	18	.0	.2	.1	.0	.0	3.8	74
NNE	.5	.2	.1	.0	.0	.0	.0	.0	11	.0	.2	.0	.0	.0	1.5	35
NE	.4	.0	.7	.0	.0	.0	.0	.0	14	.0	.4	.1	.0	.0	3.5	69
ENE	.7	.0	.1	.0	.0	.0	.0	.0	12	.0	.3	.0	.0	.0	1.5	37
E	1.0	.0	.7	.0	.0	.0	.0	.0	21	.0	.8	.3	.0	.0	2.4	68
ESE	.4	.0	.3	.0	.0	.0	.0	.0	10	.0	.7	.0	.0	.0	1.8	43
SE	.9	.1	1.0	.0	.0	.0	.0	.0	27	.0	.6	.0	.0	.0	2.1	64
SSE	1.5	.0	.7	.0	.0	.0	.0	.0	31	.0	.6	.0	.0	.0	2.2	69
S	1.3	.0	.9	.0	.0	.0	.0	.0	27	.0	1.2	.1	.0	.0	3.8	96
SSW	.7	.0	.7	.0	.0	.0	.0	.0	18	.0	1.1	.0	.0	.0	2.8	71
SW	1.1	.1	1.4	.0	.0	.0	.0	.0	34	.0	.8	.1	.0	.0	4.9	112
WSW	.1	.1	.6	.0	.0	.0	.0	.0	11	.0	1.0	.1	.0	.0	5.8	105
W	1.0	.3	.7	.0	.0	.0	.0	.0	25	.1	.9	.1	.0	.0	11.0	189
WNW	.4	.2	.2	.0	.0	.0	.0	.0	12	.0	.5	.0	.0	.0	6.1	102
NW	.2	.1	.4	.0	.0	.0	.0	.0	10	.1	.1	.1	.0	.0	7.1	111
NNW	.4	.1	.4	.0	.0	.0	.0	.0	13	.0	.1	.0	.0	.0	4.4	74
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
CALM	.1	.1	.1	.0	.0	.0	.0	.0	4	.0	.6	.0	.0	.0	1.8	36
TOT OBS	159	17	128	0	0	0	0	.3	298	2	139	14	0	0	902	1355
TOT PCT	11.7	1.3	9.4	.0	.0	.0	.0	22.0		.1	10.3	1.0	.0	.0	66.6	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	PRECIPITATION TYPE				HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
			DRZL	FRZG	SNOW	OTHER					PCPN	FG	SMOKE	DUST	NO SIG	
00003	12.0	1.8	9.1	.0	.0	.0	.0	.0	86	.3	14.6	1.6	.0	.0	61.2	384
06009	11.9	.9	11.3	.0	.0	.0	.0	.0	82	.3	11.0	.6	.0	.0	64.2	344
12015	9.7	1.6	6.5	.0	.0	.0	.0	.0	55	.0	6	.3	.0	.0	75.8	310
18021	13.0	.6	10.9	.0	.0	.0	.0	.0	78	.0	8.5	1.5	.0	.0	66.5	331
TOT	160	17	130	0	0	0	0	23.6	301	2	141	14	0	0	911	1369
PCT	11.7	1.2	9.5	.0	.0	.0	.0	22.0		.1	10.3	1.0	.0	.0	66.5	100.0

SEPTEMBER

PERIOD: (PRIMARY) 1942-1969  
(OVER-ALL) 1900-1969

AREA 0009 ADAK  
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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-3	4-10	11-21	22-33	34-47	48+	TOTAL OBS	PCT FREQ	MEAN SPD		00	03	06	09	12
N	.5	1.5	2.0	1.4	.2	.0	114	5.6	16.5		5.7	4.2	4.8	5.6	5.8
NNE	.1	.9	1.6	.6	.0	*	68	3.4	15.9		3.3	1.4	3.7	4.2	2.9
NE	.6	1.9	2.1	1.0	.1	*	118	5.8	13.6		5.3	4.2	7.4	7.7	5.0
ENE	.2	1.0	1.1	.4	.0	.0	57	2.8	13.5		2.9	2.8	2.2	3.2	3.2
E	.5	1.7	1.4	1.0	.1	.1	99	4.9	15.1		6.3	5.6	4.1	4.9	4.3
ESE	.3	.6	1.2	.5	.1	.0	56	2.8	15.9		2.5	6.9	2.6	3.5	3.2
SE	.3	1.2	1.9	.9	*	*	91	4.5	15.7		6.1	6.9	3.0	4.2	3.6
SSE	*	1.6	1.9	.7	.2	*	91	4.5	16.4		3.7	5.6	3.3	3.2	5.4
S	.2	2.3	3.1	.9	.1	*	136	6.7	14.9		5.1	12.5	10.7	4.2	6.8
SSW	.1	1.5	1.8	1.3	.1	.0	99	4.9	16.2		3.9	4.2	4.4	7.4	5.0
SW	.3	2.9	3.0	2.3	.4	.0	182	9.0	16.4		9.8	11.1	6.6	9.9	7.6
WSW	.4	2.3	2.9	1.6	.3	*	153	7.6	15.8		8.0	8.3	6.6	7.4	6.8
W	.5	4.6	5.8	2.4	.4	.2	282	13.9	15.7		13.1	8.3	13.3	15.1	15.5
WNW	*	2.0	3.5	.9	.4	*	140	6.9	16.2		6.3	5.6	8.9	6.3	9.0
NW	.5	2.1	4.1	1.7	.1	.1	175	8.6	15.9		10.2	8.3	9.6	7.0	6.8
NNW	.3	1.3	2.5	.9	.1	.0	104	5.1	15.7		4.7	4.2	7.4	3.9	6.1
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0		.0	.0	.0	.0	.0
CALM	2.9	597	812	376	63	16	59	2.9	.0		2.9	.0	1.5	2.1	2.9
TOT OBS	160	40.1	40.1	19.6	3.1	.8	2024	100.0	15.2		510	72	271	284	278
TOT PCT	7.9	29.5	29.5	13.6	3.1	.8	100.0	100.0	100.0		100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD			00	03	06	09	12
N	1.7	3.2	2.8	1.1	.2	182	9.0	16.3			9.0	5.6	8.5	9.9	8.6
NE	2.4	3.3	2.2	.6	.1	175	8.6	13.6			8.2	6.9	9.6	10.9	8.3
E	1.8	2.9	2.0	.7	.2	155	7.7	15.4			8.8	12.5	6.6	8.5	7.6
SE	1.4	3.9	2.6	.9	.2	182	9.0	16.0			9.8	12.5	6.3	7.4	9.0
S	1.7	5.4	3.3	1.1	.1	235	11.6	15.4			9.0	16.7	15.1	11.6	11.9
SW	2.8	7.0	4.5	2.3	*	335	16.6	16.1			17.8	19.4	13.3	17.3	14.4
W	2.7	10.0	6.1	1.6	.4	422	20.8	15.9			19.4	13.9	22.1	21.5	24.5
NW	1.9	6.4	4.2	1.0	.2	279	13.8	15.8			14.9	12.5	17.0	10.9	12.9
VAR	.0	.0	.0	.0	.0	0	.0	.0			.0	.0	.0	.0	.0
CALM	2.9	852	560	191	31	59	2.9	.0			2.9	.0	1.5	2.1	2.9
TOT OBS	390	42.1	27.7	9.4	1.5	2024	100.0	15.2			510	72	271	284	278
TOT PCT	19.3	42.1	42.1	13.6	1.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

SEPTEMBER

PERIOD: (PRIMARY) 1942-1969  
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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)									
WIND DIR	HOUR	WIND SPEED (KNOTS)				PCT TOTAL			
		1-3	4-10	11-21	22-33	34-47	48+	CALM	MEAN
00003	00003	6.5	29.0	39.0	18.4	3.6	.9	2.6	15.1
06009	06009	5.6	30.5	40.5	17.7	2.9	1.1	1.8	15.1
12015	12015	2.3	23.5	47.3	20.3	3.7	.3	2.6	16.4
18021	18021	4.5	32.9	36.2	18.6	2.4	.7	4.6	14.7
TOT	TOT	101	597	812	376	63	16	59	15.2
PCT	PCT	5.0	29.5	40.1	18.6	3.1	.8	2.9	100.0

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

BY WIND DIRECTION

WIND DIR	PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)							MEAN CLOUD COVER
	0-2	3-4	5-7	8 &	OBSCD	TOTAL	DBS	
N	.4	.2	1.3	3.2		49		6.8
NNE	.1	.0	.6	2.0		26		7.4
NE	.1	.1	.7	4.2		49		7.5
ENE	.0	.1	.4	1.7		21		7.4
E	.1	.1	.2	4.5		47		7.7
ESE	.0	.0	.4	2.5		28		7.8
SE	.2	.1	.5	3.1		38		7.3
SSE	.0	.2	.3	4.4		47		7.7
S	.4	.4	1.4	5.3		72		7.1
SSW	.1	.1	1.7	2.9		46		7.3
SW	.3	.3	2.0	4.9		72		7.2
WSW	.9	.3	1.4	4.8		71		6.7
W	1.6	1.8	3.8	8.1		145		6.4
WNW	1.0	1.3	2.5	3.6		80		6.0
NW	.5	.9	4.3	3.5		88		6.4
NNW	.4	.2	1.8	3.3		55		6.8
VAR	.0	.0	.0	.0		0		.0
CALM	.2	.1	.8	1.2		22		6.6
TOT OBS	62	60	230	604		956		6.9
TOT PCT	6.5	6.3	24.1	63.2		100.0		

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	CLOUD COVER	000 149	150 299	300 559	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.4	.2	1.3	3.2	49	6.8	.6	.3	.0	.5	1.3	.6	.5	.0	.1	.0	1.2	49
NNE	.1	.0	.6	2.0	26	7.4	.0	.0	.2	.9	.9	.3	.0	.1	.0	.0	.2	26
NE	.1	.1	.7	4.2	49	7.5	.2	.2	.5	1.2	1.5	.7	.1	.0	.0	.0	.7	49
ENE	.0	.1	.4	1.7	21	7.4	.1	.0	.1	.2	.9	.4	.0	.0	.0	.0	.4	21
E	.1	.1	.2	4.5	47	7.7	1.2	.0	.5	.5	1.6	.6	.0	.0	.1	.0	.4	47
ESE	.0	.0	.4	2.5	28	7.8	.4	.3	.3	.1	.9	.1	.0	.0	.0	.0	.7	28
SE	.2	.1	.5	3.1	38	7.3	.5	.1	.1	.6	1.6	.2	.2	.0	.0	.0	.6	38
SSE	.0	.2	.3	4.4	47	7.7	1.2	.0	.3	1.0	2.6	.7	.1	.0	.0	.0	.4	47
S	.4	.0	1.4	5.3	72	7.1	.9	.1	.2	1.5	2.6	.2	.1	.0	.0	.0	1.4	72
SSW	.1	.1	1.7	2.9	46	7.3	.5	.2	.3	1.0	1.8	.3	.1	.0	.0	.0	.5	46
SW	.3	.3	2.0	4.9	72	7.2	1.0	.3	.5	1.5	1.8	.8	.2	.0	.0	.1	1.3	72
WSW	.9	.3	3.8	8.8	71	6.7	.9	.2	.4	1.8	2.1	.2	.1	.0	.0	.0	1.7	71
W	1.6	1.8	3.4	8.1	145	6.4	1.6	.1	1.0	1.9	3.7	1.6	.4	.2	.1	.1	4.5	145
WNW	1.0	1.3	2.5	3.6	80	6.0	.2	.0	.8	1.6	2.4	.5	.2	.0	.1	.0	2.5	80
NW	.5	.9	4.3	3.5	88	6.4	.2	.0	.2	1.2	3.3	1.3	.1	.1	.1	.0	2.7	88
NNW	.4	.2	1.8	3.3	55	6.8	.3	.0	.2	1.0	2.1	.7	.2	.0	.1	.0	1.0	55
VAR	.0	.0	.0	.0	0		.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	0
CALM	.2	.1	.8	1.2	22	6.6	.0	.0	.0	.6	.4	.3	.0	.0	.1	.0	.7	22
TOT OBS	62	60	230	604	956	6.9	95	16	56	164	292	93	23	5	7	2	201	956
TOT PCT	6.5	6.3	24.1	63.2	100.0		9.9	1.9	5.9	17.2	30.5	9.7	2.4	.5	.7	.2	21.0	100.0

SEPTEMBER

PERIOD: (PRIMARY) 1942-1969  
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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)									
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0		
= OR >6500	.4	.9	.9	.9	.9	.9	.9	.9		
= OR >5000	.7	1.5	1.5	1.5	1.5	1.5	1.5	1.5		
= OR >3500	2.3	3.3	3.7	3.8	3.8	3.8	3.9	3.9		
= OR >2000	7.6	11.7	13.0	13.1	13.2	13.3	13.4	13.4		
= OR >1000	21.0	37.4	42.5	43.4	43.6	43.9	44.0	44.0		
= OR >600	28.7	50.9	58.4	60.0	60.9	61.3	61.4	61.4		
= OR >300	29.6	54.3	62.9	65.4	66.1	67.1	67.3	67.3		
= OR >150	29.8	55.3	64.1	66.9	68.2	68.7	69.1	69.1		
= OR > 0	31.1	58.1	68.6	72.7	75.4	77.0	78.7	79.0		
TOTAL	297	555	656	695	721	736	752	755		

TOTAL NUMBER OF OBS: 956

PCT FREQ NH <5/8: 21.0

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

										TOTAL OBS	
0	1	2	3	4	5	6	7	8	OBSCD		
2.8	3.7	5.0	4.7	5.2	5.6	7.7	11.9	44.5	8.9	1030	

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PERIOD: (PRIMARY) 1942-1969  
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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.0	.0	.0	.1	.0	.0	.0	.2	.1	.1	.4	.0	.0	.0	.0	.0	.0	.0	12	.9
NO PCP	.1	.1	.2	.1	.3	.4	.5	.4	.5	.3	.3	.2	.5	.0	.1	.1	.0	.4	61	4.5
TOTAL	1	1	3	2	4	5	7	8	8	6	9	3	7	0	2	2	0	5	73	5.4
PCP	.2	.1	.0	.0	.1	.0	.3	.4	.1	.1	.3	.0	.2	.1	.0	.1	.0	.0	27	2.0
NO PCP	.1	.0	.1	.1	.2	.1	.1	.0	.1	.0	.2	.1	.1	.1	.1	.0	.0	.1	20	1.5
TOTAL	4	1	2	1	5	1	6	5	3	1	7	1	4	3	1	1	0	1	47	3.5
PCP	.0	.1	.1	.1	.3	.1	.6	.3	.3	.1	.4	.2	.2	.1	.0	.0	.0	.0	38	2.8
NO PCP	.2	.1	.0	.1	.3	.1	.1	.1	.3	.3	.4	.4	.3	.2	.1	.0	.0	.0	42	3.1
TOTAL	3	2	1	3	8	3	9	5	8	5	10	9	7	5	2	0	0	0	80	5.9
PCP	.7	.1	.4	.1	.5	.3	.2	.7	.6	.2	.4	.3	.4	.2	.0	.2	.0	.1	76	5.6
NO PCP	.1	.2	.4	.1	.5	.1	.1	.4	.5	.5	.4	.8	1.6	.4	.3	.2	.0	.1	93	6.9
TOTAL	11	5	12	4	14	6	4	14	15	10	10	15	27	9	4	6	0	3	169	12.5
PCP	.4	.2	.5	.4	.4	.3	.6	.7	.7	.6	.7	.1	.7	.3	.6	.4	.0	.1	108	8.0
NO PCP	1.3	.7	1.4	.5	.7	.4	1.1	1.1	1.9	1.8	2.2	2.6	4.2	3.0	2.4	1.6	.0	.7	372	27.6
TOTAL	24	13	26	13	15	9	23	24	35	32	40	37	66	45	40	27	0	11	480	35.6
PCP	.0	.3	.0	.1	.1	.1	.3	.1	.3	.2	.4	.1	.2	.1	.1	.2	.0	.0	37	2.7
NO PCP	2.2	.7	1.6	.8	1.5	1.3	.8	.9	1.6	1.0	2.3	2.8	5.5	2.9	4.5	2.5	.0	1.2	461	34.2
TOTAL	30	13	22	13	22	19	15	13	26	17	36	40	77	40	62	37	0	16	498	37.0
TOTAL	73	35	66	36	68	43	64	69	95	71	112	105	188	102	111	73	0	36	1347	100.0
PCT	5.4	2.6	4.9	2.7	5.0	3.2	4.8	5.1	7.1	5.3	8.3	7.8	14.0	7.6	8.2	5.4	.0	2.7	100.0	



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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VISBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.0	.1	.0	.1	.0	.0	.0	.1	.0	.1	.0	.0	.0	.0	.3	10	.5
	4-10	.1	.0	.2	.1	.1	.0	.1	.2	.1	.2	.1	.2	.2	.0	.1	.1	.0		31	1.6
	11-21	.0	.1	.0	.0	.1	.2	.2	.1	.5	.1	.1	.1	.1	.0	.1	.1	.0		28	1.4
	22+	.0	.0	.0	.0	.0	.1	.1	.2	.0	.1	.3	.0	.1	.0	.0	.0	.0		14	.7
	TOTAL	2	1	4	2	4	5	7	9	11	6	10	4	9	0	2	2	0	5	83	4.2
1/2<1	0-3	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	4	.2
	4-10	.0	.0	.1	.1	.1	.0	.0	.1	.0	.0	.1	.0	.1	.1	.0	.0	.0		9	.5
	11-21	.1	.0	.0	.1	.2	.1	.1	.0	.1	.1	.2	.0	.1	.1	.0	.0	.0		17	.9
	22+	.1	.1	.0	.0	.1	.0	.2	.2	.1	.0	.2	.1	.1	.1	.1	.1	.0		24	1.2
	TOTAL	4	1	2	2	9	1	6	5	3	1	7	2	5	3	1	1	0	1	54	2.7
1<2	0-3	.0	.1	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	6	.3
	4-10	.1	.1	.0	.2	.1	.1	.1	.1	.1	.2	.0	.1	.1	.1	.0	.0	.0		21	1.1
	11-21	.1	.2	.1	.0	.2	.0	.3	.1	.1	.1	.2	.2	.2	.2	.1	.0	.0		32	1.6
	22+	.1	.0	.0	.2	.3	.1	.3	.2	.3	.1	.4	.3	.2	.2	.1	.1	.0		51	2.6
	TOTAL	5	6	1	6	10	4	13	7	8	7	11	11	8	7	2	1	0	3	110	5.5
2<5	0-3	.1	.0	.1	.1	.0	.1	.0	.1	.0	.0	.0	.0	.1	.0	.0	.1	.0	.4	15	.8
	4-10	.3	.1	.4	.3	.3	.1	.1	.2	.3	.2	.2	.5	.5	.1	.1	.1	.0		67	3.4
	11-21	.3	.3	.2	.2	.2	.1	.1	.4	.5	.3	.2	.4	.3	.3	.1	.1	.0		74	3.7
	22+	.3	.1	.3	.1	.4	.2	.1	.3	.1	.4	.4	.4	.9	.3	.4	.3	.0		90	4.5
	TOTAL	18	10	17	12	17	6	4	16	17	16	15	23	34	13	10	10	0	8	246	12.3
5<10	0-3	.3	.1	.3	.1	.1	.0	.1	.0	.2	.1	.2	.2	.1	.1	.1	.0	.0	1.0	52	2.6
	4-10	.2	.4	.8	.2	.2	.2	.4	.6	.8	.5	1.1	.9	1.6	.7	.8	.4	.0		188	9.4
	11-21	.8	.4	.8	.5	.5	.4	.6	.6	1.0	.6	1.1	1.0	2.3	1.4	1.2	.6	.0		266	13.3
	22+	.7	.4	.5	.1	.4	.3	.4	.2	.6	.7	1.0	.7	.7	.6	.6	.6	.0		165	8.3
	TOTAL	39	24	45	16	22	15	28	28	50	37	66	53	93	54	50	31	0	20	671	33.6
10+	0-3	.2	.0	.4	.1	.3	.2	.1	.0	.0	.1	.1	.3	.3	.0	.4	.3	.0	1.1	71	3.6
	4-10	.9	.4	.6	.3	1.0	.4	.8	.5	1.1	.6	1.6	.9	2.2	1.2	1.2	.7	.0		277	13.9
	11-21	.8	.8	1.0	.4	.5	.7	.8	.8	1.1	.7	1.4	1.3	3.0	1.7	2.8	1.8	.0		382	19.1
	22+	.4	.2	.4	.1	.2	.1	.1	.1	.1	.2	.5	.6	1.2	.3	1.0	.1	.0		106	5.3
	TOTAL	43	26	46	17	37	25	33	26	45	29	71	60	132	62	106	56	0	22	836	41.8
TOTAL		111	68	115	55	99	56	91	91	134	96	180	153	281	139	171	101	0	59	2000	100.0
PCT		5.6	3.4	5.8	2.8	5.0	2.8	4.6	4.6	6.7	4.8	9.0	7.7	14.1	7.0	8.6	5.1	.0	3.0	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8), AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	10.8	2.7	7.3	14.3	29.7	8.1	3.1	.4	.8	.0	77.2	22.8	259
06009	6.9	1.5	6.1	19.5	31.4	9.2	2.3	.8	.8	.4	78.9	21.1	261
12015	13.3	2.1	3.0	17.2	28.8	9.4	1.3	.4	.4	.4	76.4	23.6	233
18021	8.3	.9	6.1	16.7	29.4	12.3	2.6	.4	.9	.0	77.6	22.4	228
TOT	96	18	56	166	293	95	23	5	7	2	761	220	981
PCT	9.8	1.8	5.7	16.9	29.9	9.7	2.3	.5	.7	.2	77.6	22.4	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	5.5	3.2	5.1	9.1	29.2	47.8	253
06009	2.8	4.0	4.0	12.3	32.5	44.4	252
12015	2.6	2.2	2.6	15.8	35.5	41.2	228
18021	3.1	1.3	4.5	10.3	30.9	49.8	223
TOT	34	26	39	113	306	438	956
PCT	3.6	2.7	4.1	11.8	32.0	45.8	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET, NH >4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00003	11.5	22.5	42.2	36.8	20.9	253
06009	7.5	16.3	43.3	38.5	18.3	252
12015	13.6	20.2	45.6	34.6	19.7	228
18021	8.5	17.5	39.9	39.9	20.2	223
TOT	98	183	409	358	189	956
PCT	10.3	19.1	42.8	37.4	19.8	100.0

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TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP														TOTAL		PCT	
TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	DBS	TOTAL	FREQ	PCT	FREQ	DBS	TOTAL	FREQ	PCT
60/64	.0	.0	.0	.0	.2	.7	.0	.1	.1	6	.4	.4		6	99	6.1	
55/59	.0	.0	.0	.1	.1	1.7	2.2	1.4	1.4	99	6.1	6.1		99	580	35.8	
50/54	.0	.0	.0	.1	1.3	3.5	14.6	16.4	16.4	580	35.8	35.8		580	861	53.1	
45/49	.0	.0	.0	.0	.8	5.8	17.8	28.8	28.8	861	53.1	53.1		861	74	4.6	
40/44	.0	.0	.0	.0	.1	.7	1.0	2.8	2.8	74	4.6	4.6		74	1620	100.0	
TOTAL	0	0	0	4	49	189	577	801	1620	1620	100.0	100.0		1620			
PCT	.0	.0	.0	.2	3.0	11.7	35.6	49.4									

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP													
	NE	E	SE	S	SW	W	NW	VAR	CALM				
60/64	.0	.0	.0	.0	.2	.1	.1	.0	.0				
55/59	.4	.6	.5	1.0	1.0	1.5	.2	.0	.2				
50/54	2.3	3.0	4.0	4.9	7.2	7.3	3.5	.0	1.4				
45/49	5.2	4.0	4.1	5.3	8.3	10.7	8.0	.0	1.5				
40/44	.5	.3	.1	.3	.3	1.4	1.2	.0	.1				
TOTAL	137	126	140	187	276	339	212	0	51				
PCT	8.5	7.8	8.6	11.5	17.0	20.9	13.1	.0	3.1				

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR														TOTAL	
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	DBS	TOTAL	DBS	MEAN	TOTAL	DBS	TOTAL
0003	62	59	57	50	45	44	41	50.3	577	577	577	50.3	577	577	577
0609	63	58	55	49	45	3	42	49.3	557	557	557	49.3	557	557	557
1215	57	54	52	48	43	41	41	47.7	352	352	352	47.7	352	352	352
1821	59	56	53	48	44	43	40	48.5	539	539	539	48.5	539	539	539
TOT	63	58	55	49	44	42	40	49.1	2025	2025	2025	49.1	2025	2025	2025

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR														TOTAL	
HOUR (GMT)	0-29	30-59	60-69	70-79	80-89	90-100	MEAN	DBS	TOTAL	DBS	MEAN	TOTAL	DBS	TOTAL	DBS
0003	.0	.4	6.2	13.1	37.5	42.8	87	467	467	467	87	467	467	467	467
0609	.0	.2	2.4	11.1	36.5	49.8	89	468	468	468	89	468	468	468	468
1215	.0	.4	1.2	12.7	31.4	54.3	89	245	245	245	89	245	245	245	245
1821	.0	.0	1.3	10.1	35.3	53.3	89	445	445	445	89	445	445	445	445
TOT	0	4	9	189	580	803	88	1625	1625	1625	88	1625	1625	1625	1625

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	41	45	49	53	57	61	TOT	W FOG	MO FOG
14/16	.0	.0	.0	.0	.1	.0	1	.0	.1
11/13	.0	.0	.0	.1	.3	.1	5	.0	.4
9/10	.0	.0	.9	.5	.2	.0	18	.1	1.5
7/8	.0	.3	1.1	.8	.4	.0	30	.3	2.3
6	.0	.4	.9	.3	.0	.0	18	.3	1.2
5	.0	.9	3.4	1.1	.3	.0	66	.7	5.0
4	.0	1.7	2.3	.9	.1	.0	58	1.1	3.9
3	.2	2.7	2.9	.8	.0	.0	75	1.3	5.2
2	.2	5.2	6.8	.7	.0	.0	148	1.6	11.3
1	.9	6.4	3.5	.7	.0	.0	132	1.6	9.9
0	1.5	8.5	6.0	.7	.0	.0	192	1.0	15.7
-1	1.8	6.0	3.0	.2	.0	.0	127	1.7	9.3
-2	.8	6.2	3.1	.3	.0	.0	120	.4	10.0
-3	.9	3.4	1.1	.0	.0	.0	62	.6	4.8
-4	.3	2.5	.8	.0	.0	.0	41	.1	3.5
-5	.3	1.6	.4	.0	.0	.0	28	.2	2.3
-6	.2	.8	.3	.0	.0	.0	15	.0	1.3
-7/-8	.2	.9	.1	.0	.0	.0	13	.1	1.0
-9/-10	.1	.3	.0	.0	.0	.0	4	.0	.3
-11/-13	.1	.0	.0	.0	.0	.0	1	.0	.1
TOTAL	84	550	422	81	16	1	1154	127	1027
PCT	7.3	47.7	36.6	7.0	1.4	.1	100.0	11.0	89.0

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N							NE							48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47				
<1	.3	.0	.0	.0	.0	.0	1	.0	.3	.0	.0	.0	.0	1		
1-2	.0	.3	.3	.0	.0	.0	2	.0	.0	.0	.0	.0	.0	0		
3-4	.0	.0	1.0	.0	.0	.0	4	.0	.0	.0	.0	.0	.0	0		
5-6	.0	.0	.3	.3	.0	.0	2	.0	.0	.5	.3	.0	.0	3		
7	.0	.0	1.5	.8	.3	.0	10	.0	.3	.5	.0	.0	.0	3		
8-9	.0	.3	.0	.3	.0	.0	2	.0	.0	.0	.0	.0	.0	0		
10-11	.0	.0	.5	1.0	.0	.0	6	.0	.0	.0	.0	.0	.0	0		
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
13-16	.0	.0	.0	.3	.0	.0	1	.0	.0	.0	.3	.0	.0	1		
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
TOTAL	1	2	14	10	1	0	28	0	2	4	2	0	0	8		
PCT	.3	.5	3.5	2.5	.3	.0	7.0	.0	.5	1.0	.5	.0	.0	2.0		

HGT	E										SE										48+	TOTAL
<1	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL								
1-2	.8	.5	.0	.0	.0	.0	5	.5	1.0	.0	.0	.0	.0	6								
3-4	.0	.3	.5	.0	.0	.0	3	.0	1.0	.3	.0	.0	.0	5								
5-6	.0	1.0	.5	.0	.0	.0	6	.0	.3	1.3	.0	.0	.0	6								
7	.0	.3	.8	.0	.0	.0	4	.0	.3	2.0	.3	.0	.0	10								
8-9	.0	.0	.5	1.0	.0	.0	6	.0	.0	.3	.3	.0	.0	2								
10-11	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.8	.3	.0	3								
12	.0	.0	.0	.0	.3	.0	1	.0	.0	.0	.3	.3	.0	2								
13-16	.0	.0	.0	.0	.0	.0	0	.0	.0	.3	.0	.3	.0	1								
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.3	.0	2								
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.3	1								
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
TOTAL	3	8	9	4	1	0	25	2	10	16	7	2	1	38								
PCT	.8	2.0	2.3	1.0	.3	.0	6.3	.5	2.5	4.0	1.8	.5	.3	9.5								

SEPTEMBER

PERIOD: (PRIMARY)  
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TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.3	.3	.0	.0	.0	.0	2	.0	.3	.0	.0	.0	.0	1
1-2	.0	1.5	2.0	.0	.0	.0	14	.0	1.0	1.5	.0	.0	.0	10
3-4	.0	1.8	2.0	.5	.0	.0	17	.3	2.3	1.8	.3	.0	.0	18
5-6	.0	.5	1.3	.5	.0	.0	9	.0	.3	1.8	1.3	.3	.0	14
7	.0	.3	1.5	.3	.0	.0	8	.0	.0	1.8	1.0	.3	.0	12
8-9	.0	.0	.3	.8	.0	.0	4	.0	.3	.0	.3	.3	.0	3
10-11	.0	.0	.0	.0	.0	.0	0	.0	.0	.5	.0	.3	.0	3
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.3	.3	.0	.0	2
13-16	.0	.0	.3	.0	.0	.0	1	.0	.0	.3	.0	.0	.0	1
17-19	.0	.0	.0	.0	.3	.0	1	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.3	.0	.0	1	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.3	1	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	1	17	29	9	1	1	58	1	16	31	12	4	0	64
PCT	.3	4.3	7.3	2.3	.3	.3	14.5	.3	4.0	7.8	3.0	1.0	.0	16.0

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	GRAND TOTAL
<1	.0	.8	.0	.0	.0	.0	3	.3	.3	.0	.0	.0	.0	2	21
1-2	.3	1.5	.8	.0	.0	.0	10	.0	1.3	1.3	.0	.0	.0	10	54
3-4	.0	2.3	5.3	.3	.0	.0	31	.0	.8	1.5	.0	.0	.0	19	91
5-6	.0	.3	5.5	1.5	.0	.0	29	.0	.5	2.5	1.5	.0	.0	18	89
7	.0	.8	1.3	1.3	.5	.0	15	.0	.3	1.0	.3	.0	.0	6	62
8-9	.0	.0	.8	.5	.3	.0	6	.0	.0	.3	.5	.0	.0	3	21
10-11	.0	.0	.3	.3	.3	.3	4	.0	.0	.3	1.3	.0	.0	6	21
12	.0	.0	.0	.8	.0	.0	3	.0	.0	.3	1.3	.0	.0	6	13
13-16	.0	.0	.0	.5	.8	.0	6	.0	.0	.0	.5	.5	.3	5	17
17-19	.0	.0	.0	.0	.3	.0	1	.0	.0	.0	.3	.0	.0	1	3
20-22	.0	.0	.0	.8	.0	.0	3	.0	.0	.0	.0	.0	.0	1	6
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	1
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
TOTAL	1	22	55	23	8	2	111	1	12	28	23	2	1	67	399
PCT	.3	5.5	13.8	5.8	2.0	.5	27.8	.3	3.0	7.0	5.8	.5	.3	16.8	100.0

PERIOD: (PRIMARY)  
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TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	4.4	3.2	.0	.0	.0	.0					31
1-2	.2	6.6	6.3	.0	.0	.0					54
3-4	.5	8.0	12.9	1.0	.0	.0					92
5-6	.2	1.9	14.1	5.4	.2	.0					90
7	.0	1.5	8.0	4.6	1.0	.0					62
8-9	.0	.5	1.2	2.9	.7	.0					21
10-11	.0	.0	1.5	2.7	.5	.2					21
12	.0	.0	.5	2.4	.2	.0					13
13-16	.0	.0	.7	1.5	1.5	.5					17
17-19	.0	.0	.0	.2	.5	.0					3
20-22	.0	.0	.0	1.2	.0	.2					6
23-25	.0	.0	.0	.0	.0	.2					1
26-32	.0	.0	.0	.0	.0	.0					0
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	22	89	186	90	19	5					411
PCT	5.4	21.7	45.3	21.9	4.6	1.2					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT	
<6	.8	5.6	7.9	5.4	2.3	1.3	.8	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	118	4
6-7	.0	.8	4.2	9.6	10.2	3.5	3.1	1.5	2.3	.6	.6	.2	.0	.0	.0	.0	.0	.0	.0	.0	176	7
8-9	.0	.0	1.5	3.1	4.8	3.3	1.9	1.0	3.5	.2	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	95	8
10-11	.0	.0	.4	.4	2.5	.8	.8	.6	.6	.0	.8	.2	.0	.0	.0	.0	.0	.0	.0	.0	35	10
12-13	.0	.0	.0	.0	.0	.4	.2	.4	.4	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	8	11
>13	.0	.0	.0	.0	.8	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	6	9
INDET	8.3	.0	.2	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	42	0
TOTAL	44	31	68	89	99	46	34	18	34	4	11	2	0	0	0	0	0	0	0	0	480	6
PCT	9.2	6.5	14.2	18.5	20.6	9.6	7.1	3.8	7.1	.8	2.3	.4	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

OCTOBER

PERIOD: (PRIMARY) 1942-1969  
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TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN SHWR	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FOG WO PCPN	SMOKE HAZE	DUST BLWG	DUST SNOW	SIG WEA	
N	.3	.1	.3	.0	.2	.0	.1	.9	9	.0	.0	.0	.0	.0	5.5	66
NNE	.3	.1	.5	.0	.1	.0	.0	.7	7	.0	.1	.5	.0	.0	2.2	36
NE	.6	.1	.7	.0	.0	.0	.0	1.2	12	.0	.2	.3	.0	.0	2.0	38
ENE	.3	.0	.5	.0	.0	.0	.0	.8	8	.0	.0	.0	.0	.0	1.2	20
E	.6	.0	.6	.0	.0	.0	.0	1.2	12	.0	.2	.0	.0	.0	1.6	30
ESE	.7	.2	.2	.0	.0	.0	.0	1.1	11	.0	.1	.0	.0	.0	.8	20
SE	1.9	.0	.7	.0	.0	.0	.0	2.1	22	.0	.4	.0	.0	.0	1.4	40
SSE	1.2	.0	.5	.0	.0	.0	.0	1.3	13	.0	.0	.0	.0	.0	.9	22
S	2.0	.1	1.1	.0	.0	.0	.0	2.9	30	.2	.1	.1	.0	.0	2.6	61
SSW	.7	.2	.6	.0	.0	.0	.0	1.5	15	.0	.5	.0	.0	.0	2.5	46
SW	1.2	.2	.7	.0	.0	.0	.0	2.0	21	.0	.8	.2	.0	.0	6.0	93
WSW	1.1	.5	.4	.0	.0	.0	.0	1.9	20	.0	.3	.0	.1	.0	6.6	92
W	1.3	.6	1.1	.0	.0	.1	.0	2.9	30	.0	.4	.1	.0	.0	15.4	193
WNW	.4	.1	.3	.0	.0	.0	.0	.7	7	.0	.0	.0	.0	.0	8.7	96
NW	.9	.5	.5	.0	.2	.0	.1	2.1	22	.0	.1	.1	.0	.0	7.2	98
NNW	.0	.0	.2	.0	.1	.0	.0	.3	3	.0	.0	.0	.0	.0	6.6	71
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
CALM	.0	.1	.0	.0	.0	.0	.0	.1	1	.0	.0	.0	.0	.0	.5	6
TOT OBS	137	28	89	0	6	1	2	23.6	243	2	32	13	1	737	1028	
TOT PCT	13.3	2.7	8.7	.0	.6	.1	.2			.2	3.1	1.3	.1	71.7	100.0	

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN SHWR	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FOG WO PCPN	SMOKE HAZE	DUST BLWG	DUST SNOW	SIG WEA	
0003	12.0	3.3	6.6	.0	.7	.4	.4	23.0	63	.0	4.7	2.6	.0	.0	69.7	274
0609	16.0	1.9	10.1	.0	.8	.0	.0	25.7	66	.4	3.1	1.2	.0	.0	69.6	257
12015	10.9	2.0	6.9	.0	.4	.0	.0	16.1	40	.0	1.6	.0	.0	.0	82.3	248
18021	15.1	3.5	12.0	.0	.4	.0	.4	29.8	77	.4	2.7	1.2	.4	.4	65.5	258
TOT	140	28	92	0	6	1	2	23.7	246	2	32	13	1	743	1037	
PCT	13.5	2.7	8.9	.0	.6	.1	.2			.2	3.1	1.3	.1	.1	71.6	100.0



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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	00	03	06	09	12					15	18	21					
N	.2	2.1	2.4	1.0	.3	.1	106	6.1	15.6	6.8	3.3	7.3	6.0	7.3	1.4	5.2	5.9					
NNE	.1	.3	1.7	.7	.6	.0	57	3.3	21.7	4.3	11.7	6.4	1.6	2.6	.0	1.4	1.7					
NE	.1	2.3	1.7	.5	.2	.0	83	4.8	13.8	6.1	5.0	1.4	7.7	.4	5.7	6.6	5.0					
ENE	.2	.3	1.2	.4	.1	.1	38	2.2	18.2	2.5	1.7	2.3	2.0	2.1	8.6	1.4	.8					
E	.1	1.3	.6	.4	.3	.1	47	2.7	16.6	2.3	.0	.9	3.6	3.0	4.3	4.7	2.5					
ESE	.1	.5	.3	.5	.2	.1	28	1.6	18.9	2.0	6.7	.0	1.2	1.3	.0	1.4	2.5					
SE	.3	1.0	.8	.7	.5	.1	58	3.4	18.6	2.7	3.3	2.7	4.4	2.6	5.7	2.3	5.0					
SSE	.2	.3	.4	.8	.4	.1	36	2.1	22.4	1.4	1.7	2.3	3.2	2.1	5.7	2.3	.8					
S	.3	1.5	1.5	1.0	.5	.1	86	5.0	17.9	6.1	1.7	5.9	4.0	4.7	4.3	4.7	4.6					
SSW	.2	1.3	1.7	.5	.2	.0	67	3.9	15.2	4.3	1.7	6.8	2.0	3.4	1.4	6.1	2.1					
SW	.9	3.8	3.6	1.6	.2	.1	173	10.0	14.1	9.5	10.0	6.8	10.1	9.8	8.6	10.3	14.1					
WSW	.2	1.7	3.5	2.0	.6	.5	148	8.6	20.7	9.0	6.7	7.7	8.9	9.0	8.6	7.5	9.1					
W	.5	4.8	7.4	4.5	.8	.1	312	18.1	17.0	17.2	15.0	20.5	17.3	20.5	20.0	18.8	15.4					
WNW	.2	2.3	4.1	2.0	.9	.2	167	9.7	18.7	8.6	21.7	12.7	8.1	11.1	14.3	8.9	5.4					
NW	.4	3.1	4.0	2.3	1.0	.1	188	10.9	17.7	10.2	5.0	9.1	11.7	10.3	8.6	10.3	16.2					
NNW	.1	1.6	2.1	1.7	.5	.0	102	5.9	18.3	5.2	5.0	7.3	5.2	8.5	2.9	7.5	3.7					
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0					
CALM	1.9	487	639	354	125	21	32	1.9	.0	1.8	.0	.0	2.8	1.3	.0	.5	5.4					
TOT OBS	102	28.2	37.0	20.5	7.2	1.2	1728	100.0	17.1	442	60	220	248	234	70	213	241					
TOT PCT	5.9							100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0					

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-6	7-16	17-27	28-40	41+				00	03	06	09	12	15	18	21
N	1.0	4.0	3.0	.9	.5	163	9.4	17.7	11.1	15.0	13.6	7.7	9.8	1.4	6.6	7.5
NE	1.6	2.5	2.2	.5	.2	121	7.0	15.2	8.6	6.7	3.6	9.7	2.6	14.3	8.0	5.8
E	1.0	1.4	1.0	.5	.3	75	4.3	17.5	4.3	6.7	.9	4.8	4.3	4.3	6.1	5.0
SE	1.2	1.2	1.5	1.0	.5	94	5.4	20.0	4.1	5.0	5.0	7.7	4.7	11.4	4.7	5.8
S	1.6	3.4	2.4	1.0	.4	153	8.9	16.7	10.4	3.3	12.7	6.0	8.1	5.7	10.8	6.6
SW	3.4	6.4	6.0	2.1	.7	321	18.6	17.1	18.6	16.7	14.5	19.0	18.8	17.1	17.8	23.2
W	3.9	10.0	9.3	4.2	.3	479	27.7	17.6	25.8	36.7	33.2	25.4	31.6	34.3	27.7	20.7
NW	2.6	6.3	4.5	3.0	.4	290	16.8	17.9	15.4	10.0	16.4	16.9	18.8	11.4	17.8	19.9
VAR	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.9	607	517	230	58	32	1.9	.0	1.8	.0	.0	2.8	1.3	.0	.5	5.4
TOT OBS	316	35.1	29.9	13.3	3.4	1728		17.1	442	60	220	248	234	70	213	241
TOT PCT	18.3						100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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PERIOD: (PRIMARY) 1942-1969  
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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	1-3	4-10	11-21	WIND SPEED (KNOTS)			CALM	PCT		TOTAL OBS
				22-33	34-47	48+		MEAN	FREQ	
00003	5.0	27.1	35.5	21.7	8.0	1.2	1.6	17.4	100.0	502
06009	4.9	28.6	37.0	20.1	6.6	1.3	1.5	16.9	100.0	468
12015	1.3	23.7	40.5	23.0	9.5	1.0	1.0	18.9	100.0	304
18021	4.0	31.9	36.3	17.8	5.5	1.3	3.1	15.9	100.0	454
TOT	70	487	639	354	125	21	32	17.1		1728
PCT	4.1	28.2	37.0	20.5	7.2	1.2	1.9		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

BY WIND DIRECTION

WIND DIR	PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)						TOTAL OBS	MEAN CLOUD COVER
	0-2	3-4	5-7	8-10	11-14	15-18		
N	.4	.5	3.6	2.0	49	6.4		
NNE	.1	.5	.9	1.8	26	6.6		
NE	.1	.1	.9	1.7	22	7.0		
ENE	.1	.3	.3	1.3	15	6.9		
E	.1	.3	.7	1.4	19	6.6		
ESE	.4	.0	.4	.7	11	5.5		
SE	.3	.3	.5	1.7	21	6.6		
SSE	.0	.1	.1	1.7	15	7.5		
S	.1	.5	.9	4.1	43	7.2		
SSW	.3	.4	1.1	3.7	41	7.0		
SW	.9	1.1	1.8	5.1	68	6.4		
WSW	.9	2.1	2.6	3.6	70	5.7		
W	2.8	2.9	8.7	5.9	154	5.6		
WNW	2.0	2.4	3.8	2.1	78	4.9		
NW	.4	2.1	3.2	2.8	64	5.9		
NNW	.9	.5	4.6	1.8	60	5.9		
VAR	.0	.0	.0	.0	0	.0		
CALM	.4	.0	.0	.1	4	3.0		
TOT OBS	78	107	259	316	760	6.1		
TOT PCT	10.3	14.1	34.1	41.6	100.0			

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT, NH >4/8)												TOTAL OBS
	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8 ANY HGT		
N	.1	.0	.3	.9	2.6	1.1	.1	.0	.0	.0	1.3		49
NNE	.0	.0	.1	.9	1.1	.7	.0	.0	.0	.0	.7		26
NE	.0	.0	.4	.7	1.1	.3	.0	.0	.0	.0	.5		22
ENE	.0	.0	.3	.4	.5	.3	.0	.0	.0	.0	.5		15
E	.3	.0	.0	.7	.3	.8	.0	.0	.0	.0	.5		19
ESE	.0	.0	.1	.1	.4	.1	.0	.0	.1	.0	.5		11
SE	.3	.0	.1	.5	.7	.4	.1	.0	.0	.1	.5		21
SSE	.3	.0	.0	.4	.8	.1	.0	.1	.0	.0	.3		15
S	.4	.0	.5	1.8	1.6	.1	.1	.0	.0	.0	1.1		43
SSW	.5	.0	.1	1.2	1.8	.7	.0	.0	.0	.0	1.1		41
SW	.8	.0	.0	2.2	1.6	.5	.3	.4	.0	.0	3.2		68
WSW	.5	.1	.4	1.6	1.3	.8	.1	.0	.1	.0	4.2		70
W	.3	.4	1.1	2.2	6.1	2.4	.4	.0	.0	.0	7.5		154
WNW	.0	.0	.1	.9	2.5	.9	.0	.3	.0	.0	5.5		78
NW	.0	.0	.4	1.1	2.4	1.4	.1	.0	.0	.0	3.0		64
NNW	.0	.0	.0	1.7	3.3	.4	.3	.0	.0	.0	2.2		60
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0		0
CALM	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.4		4
TOT OBS	26	4	30	133	212	83	12	6	2	1	251		760
TOT PCT	3.4	.5	3.9	17.5	27.9	10.9	1.6	.8	.3	.1	33.0		100.0

PERIOD: (PRIMARY) 1942-1969  
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AREA 0009 ADAK  
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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NH)

CEILING (FEET)	VSBY (NH)									
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0		
= OR >6500	.1	.3	.4	.4	.4	.4	.4	.4		
= OR >5000	.7	1.0	1.2	1.2	1.2	1.2	1.2	1.2		
= OR >3500	1.8	2.5	2.7	2.7	2.7	2.7	2.7	2.7		
= OR >2000	8.8	12.6	13.5	13.6	13.6	13.6	13.6	13.6		
= OR >1000	23.8	36.8	40.8	42.0	42.1	42.1	42.1	42.1		
= OR >600	29.7	49.9	57.2	59.4	59.6	59.6	59.6	59.6		
= OR >300	30.8	52.5	60.7	63.0	63.1	63.2	63.4	63.4		
= OR >150	30.9	52.9	61.1	63.5	63.6	63.7	63.9	63.9		
= OR > 0	31.2	53.8	63.0	65.8	66.5	66.9	67.1	67.1		
TOTAL	238	411	481	503	508	511	513	513		

TOTAL NUMBER OF OBS: 764

PCT FREQ NH <5/8: 32.9

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

										TOTAL
										OBS
0	1	2	3	4	5	6	7	8		
2.1	4.4	9.8	9.1	7.4	9.7	12.1	10.9	31.5	3.0	813

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PERIOD: (PRIMARY) 1942-1969  
(OVER-ALL) 1900-1969

AREA 0009 ADAK  
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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.0	.0	.0	.1	.1	.0	.3	.0	.3	.0	.0	.0	.1	.0	.0	.0	.0	.0	9	.9
NO PCP	.0	.0	.1	.0	.0	.0	.1	.0	.0	.1	.2	.1	.0	.0	.0	.0	.0	.0	6	.6
TOTAL	0	0	1	1	1	0	4	0	3	1	2	1	1	0	0	0	0	0	15	1.5
1/2<1	.1	.0	.0	.0	.0	.2	.4	.1	.1	.0	.0	.3	.0	.0	.0	.0	.0	.0	12	1.2
NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.0	.0	.1	.0	.0	.0	.0	.0	3	.3
TOTAL	1	0	0	0	0	2	4	1	2	1	0	3	1	0	0	0	0	0	15	1.5
1<2	.1	.0	.1	.1	.1	.2	.3	.2	.5	.3	.4	.3	.1	.2	.2	.1	.0	.0	32	3.1
NO PCP	.0	.1	.0	.0	.0	.0	.2	.1	.1	.2	.2	.1	.4	.0	.0	.0	.0	.0	14	1.4
TOTAL	1	1	1	1	1	2	5	3	6	5	6	4	5	2	2	1	0	0	46	4.5
2<5	.3	.4	.2	.3	.5	.4	.8	.6	.7	.2	.8	.6	.7	.2	.5	.1	.0	.0	73	7.1
NO PCP	.5	.5	.4	.0	.2	.1	.1	.1	.2	.3	.8	.6	1.4	.7	.3	.3	.0	.0	65	6.3
TOTAL	8	9	6	3	7	5	9	7	9	5	16	12	21	9	8	4	0	0	138	13.5
5<10	.4	.3	.6	.2	.5	.3	.4	.4	1.3	.9	.6	.7	1.4	.2	.6	.1	.0	.0	89	8.7
NO PCP	2.0	1.1	.7	.5	1.0	.3	.6	.1	.9	.8	1.8	2.7	4.5	3.0	3.3	1.5	.0	.1	254	24.8
TOTAL	25	14	13	7	15	6	10	5	22	17	24	35	60	33	40	16	0	1	343	33.5
10+	.0	.0	.3	.1	.0	.0	.0	.0	.1	.1	.2	.0	.7	.1	.9	.0	.0	.1	26	2.5
NO PCP	3.0	1.2	1.4	.7	.6	.5	.8	.6	1.8	1.6	4.1	3.5	9.6	5.0	3.8	4.9	.0	.3	442	43.1
TOTAL	31	12	17	8	6	5	8	6	19	17	44	36	105	52	48	50	0	4	468	45.7
TOTAL	66	36	38	20	30	20	40	22	61	46	92	91	193	96	98	71	0	5	1025	100.0
PCT	6.4	3.5	3.7	2.0	2.9	2.0	3.9	2.1	6.0	4.5	9.0	8.9	18.8	9.4	9.6	6.9	.0	.5	100.0	

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PERIOD: (PRIMARY) 1942-1969  
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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	4-10	.0	.0	.1	.0	.0	.0	.1	.0	.1	.1	.1	.0	.0	.0	.0	.0	.0	.0	6	.4
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.1	.0	.0	.0	.0	.0	2	.1
	22+	.0	.0	.0	.1	.1	.0	.2	.0	.1	.0	.0	.1	.1	.0	.0	.0	.0	.0	9	.5
	TOTAL	0	0	1	1	1	0	4	0	4	1	2	1	2	0	0	0	0	0	17	1.0
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	4-10	.1	.0	.0	.0	.1	.0	.1	.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	5	.3
	11-21	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0	4	.2
	22+	.1	.0	.0	.0	.0	.1	.2	.1	.0	.0	.0	.2	.0	.1	.0	.0	.0	.0	11	.6
	TOTAL	2	0	0	0	1	2	4	1	2	1	0	4	1	2	0	0	0	0	20	1.2
1<2	0-3	.0	.0	.1	.1	.0	.0	.0	.1	.0	.1	.2	.0	.1	.0	.0	.0	.0	.0	8	.5
	4-10	.1	.0	.1	.1	.0	.0	.1	.0	.1	.2	.3	.1	.1	.0	.0	.1	.0	.0	22	1.3
	11-21	.0	.0	.1	.0	.0	.1	.1	.1	.1	.1	.4	.1	.2	.1	.0	.1	.0	.0	22	1.3
	22+	.0	.1	.0	.0	.1	.1	.2	.2	.2	.1	.1	.2	.2	.0	.2	.1	.0	.0	28	1.6
	TOTAL	2	1	3	2	2	4	7	5	7	6	16	6	10	2	3	4	0	0	80	4.7
2<5	0-3	.1	.0	.0	.1	.1	.0	.0	.0	.1	.0	.1	.1	.0	.1	.1	.1	.0	.2	15	.9
	4-10	.2	.0	.4	.0	.2	.1	.1	.0	.2	.4	.6	.2	.6	.2	.3	.1	.0	.0	63	3.7
	11-21	.2	.1	.2	.1	.1	.0	.1	.2	.3	.0	.3	.3	.7	.5	.1	.1	.0	.0	54	3.2
	22+	.2	.4	.1	.1	.1	.2	.4	.3	.3	.3	.5	.5	.8	.3	.4	.2	.0	.0	85	5.0
	TOTAL	11	9	10	4	8	5	10	8	14	11	26	20	37	19	14	7	0	4	217	12.7
5<10	0-3	.1	.1	.1	.1	.0	.0	.1	.0	.2	.1	.4	.1	.3	.0	.2	.0	.0	.5	36	2.1
	4-10	.7	.1	.6	.1	.5	.1	.3	.1	.5	.3	1.1	.5	1.7	1.0	1.4	.2	.0	.0	151	8.8
	11-21	.8	.9	.5	.5	.4	.1	.4	.0	.4	.9	.7	1.3	2.7	1.0	1.2	.4	.0	.0	203	11.9
	22+	.6	.6	.4	.3	.4	.2	.1	.5	.8	.2	.6	1.1	1.2	1.3	1.4	.8	.0	.0	180	10.5
	TOTAL	37	27	27	15	21	8	14	10	29	26	47	51	100	56	71	22	0	9	570	33.3
10+	0-3	.1	.0	.0	.0	.0	.1	.2	.1	.1	.1	.2	.1	.2	.1	.2	.0	.0	1.1	41	2.4
	4-10	1.1	.2	1.2	.2	.5	.2	.5	.2	.8	.3	1.7	.8	2.4	1.1	1.5	1.2	.0	.0	236	13.8
	11-21	1.5	.7	1.0	.6	.2	.1	.3	.7	.7	.8	2.1	1.7	3.6	2.5	2.7	1.7	.0	.0	348	20.4
	22+	.5	.2	.2	.1	.1	.1	.1	.2	.2	.1	.6	1.0	3.2	1.5	1.4	1.1	.0	.0	181	10.6
	TOTAL	54	20	42	16	14	9	19	12	30	21	78	61	160	86	99	67	0	18	806	47.1
	TOTAL	106	57	83	38	47	28	58	36	86	66	169	143	310	165	187	100	0	31	1710	100.0
	PCT	6.2	3.3	4.9	2.2	2.7	1.6	3.4	2.1	5.0	3.9	9.9	8.4	18.1	9.6	10.9	5.8	.0	1.8	100.0	

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PERIOD: (PRIMARY) 1942-1969  
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH > 4/8), AND  
OCCURRENCE OF NH < 5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL ANY HGT	NH < 5/8 TOTAL OBS
00003	3.2	.5	4.3	18.8	25.8	8.6	1.6	1.1	.5	.0	64.5	35.5
06009	3.9	1.0	3.4	17.6	30.4	8.8	2.9	.0	.0	.5	68.6	31.4
12015	3.8	.0	3.4	13.9	28.4	11.5	.5	1.0	.0	.0	62.5	37.5
18021	2.2	.5	4.3	17.9	26.6	13.6	1.1	1.1	.5	.0	67.9	32.1
TOT	26	4	30	133	218	83	12	6	2	1	515	267
PCT	3.3	.5	3.8	17.0	27.9	10.6	1.5	.8	.3	.1	65.9	34.1

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.6	.6	3.3	8.9	26.7	60.0	180
06009	1.0	1.0	2.5	10.4	31.2	54.0	202
12015	.5	.0	3.0	14.4	25.4	56.7	201
18021	.6	1.1	3.9	8.3	26.5	59.7	181
TOT	5	5	24	81	210	439	764
PCT	.7	.7	3.1	10.6	27.5	57.5	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET, NH > 4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH < 5/8 AND 5+ TOTAL OBS
00003	3.3	8.3	34.4	35.0	30.6
06009	4.0	8.4	33.2	37.6	29.2
12015	3.5	7.0	31.3	35.3	33.3
18021	2.2	7.2	29.3	39.2	31.5
TOT	25	59	245	281	238
PCT	3.3	7.7	32.1	36.8	31.2

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PERIOD: (PRIMARY) 1942-1969  
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TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP													
TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ			
55/59	.0	.0	.1	.1	.2	.3	.0	.1	12	.9			
50/54	.0	.0	.0	.3	1.6	1.9	2.7	2.5	122	9.0			
45/49	.0	.0	.1	.6	3.2	10.2	15.3	18.0	641	47.5			
40/44	.0	.0	.0	.1	3.3	8.7	12.5	14.1	522	38.7			
35/39	.0	.0	.0	.0	.5	1.0	1.0	1.0	49	3.6			
30/34	.0	.0	.0	.0	.0	.0	.1	.1	3	.2			
TOTAL	0	0	4	15	120	299	427	484	1349	100.0			
PCT	.0	.0	.3	1.1	8.9	22.2	31.7	35.9					

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP										
	N	NE	E	SE	S	SW	W	NW	VAR	CALM
55/59	.1	.0	.0	.0	.1	.4	.1	.1	.0	.1
50/54	.4	.5	.3	.3	1.3	3.0	1.6	1.3	.0	.4
45/49	4.5	3.0	1.5	2.8	6.0	10.5	13.0	5.3	.0	1.0
40/44	3.9	3.1	1.9	2.4	2.1	5.9	10.7	8.0	.0	.6
35/39	1.0	.5	.1	.1	.0	.1	1.1	.5	.0	.2
30/34	.1	.0	.0	.0	.0	.0	.0	.1	.0	.0
TOTAL	135	96	51	75	129	269	357	206	0	31
PCT	10.0	7.1	3.8	5.6	9.6	19.9	26.5	15.3	.0	2.3

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR										
HOURL (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS	
00003	57	55	52	46	40	36	33	46.2	498	
06009	57	52	50	45	40	37	34	45.1	473	
12015	55	51	49	44	38	37	36	44.1	306	
18021	57	52	50	44	39	36	34	44.4	453	
TOT	57	54	50	45	39	36	33	45.0	1730	

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR										
HOURL (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS		
00003	.0	2.2	11.7	22.1	33.7	30.3	83	403		
06009	.0	1.6	9.1	21.8	27.2	40.4	85	386		
12015	.0	.9	7.9	23.1	38.0	30.1	84	216		
18021	.0	.6	5.9	21.3	30.3	42.0	86	357		
TOT	0	19	120	299	431	493	84	1362		

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	33	37	41	45	49	53	57	TOT	W	WU
	36	40	44	48	52	56	60		FDG	FDG
11/13	.0	.0	.0	.0	.2	.0	.0	2	.0	.2
9/10	.0	.0	.0	.0	.1	.1	.0	2	.0	.2
7/8	.0	.0	.0	.3	.2	.0	.0	5	.0	.5
6	.0	.0	.1	.4	.1	.0	.0	6	.0	.7
5	.0	.0	.3	.8	.4	.0	.0	14	.1	1.4
4	.0	.0	.2	1.5	1.0	.1	.0	26	.2	2.6
3	.0	.0	.1	2.3	1.1	.0	.0	32	.2	3.3
2	.0	.1	1.1	6.5	1.0	.0	.2	81	.4	8.5
1	.0	.0	2.4	5.4	1.2	.0	.0	82	.5	8.5
0	.0	.4	7.1	8.5	1.5	.1	.0	161	.9	16.8
-1	.0	.2	5.2	4.3	.8	.0	.0	95	.2	10.2
-2	.0	.9	5.6	4.2	.2	.0	.0	99	.1	10.8
-3	.0	.8	4.0	2.3	.0	.0	.0	64	.2	6.8
-4	.0	2.1	3.7	2.4	.2	.0	.0	77	.1	8.4
-5	.1	2.1	3.3	1.8	.4	.0	.0	70	.3	7.4
-6	.2	1.4	1.6	.3	.0	.0	.0	33	.0	3.6
-7/-8	.4	.9	1.5	.5	.2	.0	.0	33	.1	3.5
-9/-10	.2	.5	.7	.4	.0	.0	.0	17	.0	1.9
-11/-13	.1	.5	.3	.0	.0	.0	.0	9	.0	1.0
-14/-16	.2	.0	.0	.0	.0	.0	.0	2	.0	.2
TOTAL	12	91	340	382	20	3	2	910	32	878
PCT	1.3	10.0	37.4	42.0	8.8	.3	.2	100.0	3.5	96.5



PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N					NE					TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47			
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
1-2	.3	.0	.0	.0	.0	.0	.3	.3	.0	.0	1	.0	2
3-4	.0	.7	1.7	.0	.0	.0	.3	.3	.0	.0	7	.0	2
5-6	.0	.0	2.1	1.4	.0	.0	.0	.3	.0	.0	10	.0	1
7	.0	.0	.3	.7	.0	.0	.3	.7	.0	.0	5	.0	3
8-9	.0	.0	.7	.3	.0	.0	.0	.0	.0	.0	3	.0	0
10-11	.0	.0	1.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
13-16	.0	.0	.0	1.0	.0	.0	.0	.0	.0	.0	3	.0	0
17-19	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	1	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
23-25	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	1	.0	0
26-32	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	1	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	1	2	17	11	4	0	3	5	0	0	35	0	8
PCT	.3	.7	5.9	3.8	1.4	.0	1.0	1.7	.0	.0	12.2	.0	2.8

HGT	E					SE					TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47			
<1	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	2	.0	0
1-2	.0	.3	.0	.0	.0	.0	.7	.0	.0	.0	1	.0	2
3-4	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	0	.0	1
5-6	.0	.0	.0	.0	.0	.0	.3	.0	.3	.0	0	.0	2
7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	1	.0	1
10-11	.0	.0	.0	.3	.0	.0	.0	.0	.0	.3	1	.0	1
12	.0	.0	.0	.0	.0	.0	.0	.0	.7	.0	0	.0	2
13-16	.0	.0	.3	.0	.0	.0	.0	.0	.0	.7	1	.0	2
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	1
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	0	3	1	1	0	0	4	0	4	3	5	1	12
PCT	.0	1.0	.3	.3	.0	.0	1.4	.0	1.4	1.0	1.7	.3	4.2

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S										SW										TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+										
<1	.0	.3	.0	.0	.0	.0	1	.0	.0	.0	.0	.0	.0	.0	.0	0							
1-2	.0	.0	.7	.0	.0	.0	2	.0	.7	.0	.0	.0	.0	.0	.0	4							
3-4	.0	.7	2.1	.7	.0	.0	10	.0	1.4	4.2	.3	.0	.0	.0	.0	17							
5-6	.0	.3	.7	1.0	.0	.0	6	.0	.0	3.5	1.0	.0	.0	.0	.0	13							
7	.0	.0	.3	.7	.0	.0	3	.0	.0	.3	.7	.0	.0	.0	.0	3							
8-9	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	1.7	.3	.0	.0	.0	6							
10-11	.0	.0	.0	.3	.0	.0	1	.0	.0	.0	1.4	.0	.0	.0	.0	4							
12	.0	.0	.0	.3	.0	.0	1	.0	.0	.0	.3	.0	.0	.0	.0	1							
13-16	.0	.0	.0	.3	.7	.3	4	.0	.0	.0	.0	.0	.0	.0	.0	0							
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.3	.0	.0	.0	.0	1							
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.3	.3	.0	.0	.0	2							
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0							
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0							
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0							
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0							
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0							
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0							
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0							
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	0							
TOTAL	.0	1.4	3.8	3.5	2	1	28	.0	2.1	8.7	6.3	.7	.0	.0	.0	51							
PCT	.0	.3	3.8	3.5	.7	.3	9.7	.0	.0	.0	.0	.0	.0	.0	.0	17.7							

HGT	W					NW					TOTAL	48+	NW					TOTAL	GRAND TOTAL																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47			48+	1-3	4-10	11-21	22-33			34-47	48+																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
<1	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

PERIOD: (PRIMARY)  
(OVER-ALL) 1965-1969

OCTOBER

AREA 0009 ADAK  
51-55N 172-180W

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	.3	1.0	.0	.0	.0	.0					4
1-2	.7	4.2	3.5	.0	.0	.0					24
3-4	.0	5.9	15.2	3.8	.0	.0					72
5-6	.0	3.1	13.1	5.9	.3	.0					65
7	.0	.7	7.6	6.2	.7	.0					44
8-9	.0	.0	.0	5.2	1.0	.0					23
10-11	.0	.0	1.7	4.8	.7	.0					21
12	.0	.0	.3	2.1	.3	.0					8
13-16	.0	.0	.3	1.7	2.4	.3					14
17-19	.0	.0	.0	1.0	.7	.0					5
20-22	.0	.0	.0	.7	.7	.3					5
23-25	.0	.0	.0	.0	1.0	.0					3
26-32	.0	.0	.0	.0	.3	.0					1
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	3	43	126	91	24	2					289
PCT	1.0	14.9	43.6	31.5	8.3	.7					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.6	2.2	8.7	5.6	1.9	2.5	1.5	.0	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	77
6-7	.0	.6	5.0	15.5	6.5	4.6	2.8	1.9	2.2	1.2	.9	.9	.3	.0	.0	.0	.0	.0	.0	.0	137
8-9	.0	.3	.9	4.3	4.6	3.7	3.1	1.9	.9	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	65
10-11	.0	.0	.0	.3	.6	3.4	1.9	.0	.6	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	27
12-13	.0	.0	.0	.0	.0	.9	.0	.0	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	6
>13	.0	.0	.0	.3	.0	.0	.0	.3	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	11
INDET	1.9	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4
TOTAL	8	10	47	84	45	49	30	16	20	5	5	3	1	0	0	0	0	0	0	323	7
PCT	2.5	3.1	14.6	26.0	13.9	15.2	9.3	5.0	6.2	1.5	1.5	.9	.3	.0	.0	.0	.0	.0	.0	.0	100.0

NOVEMBER

PERIOD: (PRIMARY) 1943-1969  
(OVER-ALL) 1907-1969

AREA 0009 ADAK  
51-55N 172-180W

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			MAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW	OTHER FRZN PCPN					FOG NO	SMOKE	DUST	BLWG	SIG	
N	.5	.1	.2	.0	.6	.0	.5	1.7	14	.0	.1	.0	.0	.0	3.9	46
NNE	.0	.0	.1	.0	.1	.0	.0	.2	2	.0	.0	.0	.0	.0	2.4	21
NE	.9	.1	.1	.0	.1	.0	.0	1.1	9	.0	.0	.0	.0	.0	2.1	26
ENE	.1	.0	.4	.0	.7	.0	.0	.6	5	.0	.0	.0	.0	.0	2.2	25
E	.6	.0	.2	.0	.1	.0	.0	1.6	13	.0	.1	.1	.1	.1	2.4	35
ESE	1.4	.0	.5	.0	.1	.0	.0	1.9	15	.0	.1	.0	.0	.0	1.4	27
SE	1.6	.1	.5	.0	.2	.0	.0	2.5	20	.0	.7	.4	.0	.0	1.9	44
SSE	1.4	.0	.6	.0	.1	.0	.0	2.0	16	.0	.1	.1	.0	.0	2.0	34
S	.7	.0	1.1	.0	.1	.0	.0	2.0	16	.0	.1	.1	.0	.0	3.5	46
SSW	.2	.2	.4	.0	.5	.0	.0	1.4	11	.1	.0	.5	.0	.0	3.5	44
SW	1.1	.0	1.9	.0	.4	.0	.1	3.0	24	.0	.9	.2	.0	.0	4.7	71
WSW	1.1	.1	.7	.0	.4	.0	.2	2.4	19	.0	.0	.2	.0	.0	7.0	77
W	.2	1.1	.5	.0	1.0	.0	.6	3.2	26	.0	.1	.1	.0	.0	10.6	113
WNW	.9	.2	.2	.0	1.1	.0	.1	2.4	19	.0	.0	.0	.0	.0	5.6	64
NW	.7	.6	.2	.0	2.0	.0	.2	3.4	27	.0	.4	.0	.0	.0	6.8	85
NNW	.0	.2	.1	.0	.4	.0	.0	.7	6	.0	.0	.1	.0	.0	3.9	38
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
CALM	.0	.0	.2	.0	.2	.0	.0	.5	4	.0	.0	.0	.0	.0	.5	8
TOT OBS	93	24	66	0	67	0	15	30.6	246	1	22	18	1	1	516	804
TOT PCT	11.6	3.0	8.2	.0	8.3	.0	1.9			.1	2.7	2.2	.1	.1	64.2	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			MAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW	OTHER FRZN PCPN					FOG NO	SMOKE	DUST	BLWG	SIG	
00003	12.1	4.2	9.3	.0	12.1	.0	.9	35.5	76	.5	3.3	3.3	.0	.0	57.5	214
06009	10.0	1.4	8.6	.0	8.1	.0	1.0	27.6	58	.0	4.3	3.3	.0	.0	64.8	210
12015	10.0	4.2	5.3	.0	4.7	.0	2.6	23.7	45	.0	1.1	.0	.0	.0	75.3	190
18021	13.9	2.1	9.8	.0	7.7	.0	3.1	35.1	68	.0	2.1	2.1	.5	.5	60.3	194
TOT	93	24	67	0	67	0	15	30.6	247	1	22	18	1	1	519	808
PCT	11.5	3.0	8.3	.0	8.3	.0	1.9			.1	2.7	2.2	.1	.1	64.2	100.0

NOVEMBER

PERIOD: (PRIMARY) 1943-1969  
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AREA 0009 ADAK  
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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-3	4-10	11-21	22-33	34-47	48+	TOTAL OBS	PCT FREQ	MEAN SPD	00	03	06	09	12	15
N	.3	1.5	2.1	1.4	.2	.0	68	5.4	16.9	5.7	.0	7.7	3.3	6.1	3.6
NNE	.1	1.0	1.2	.8	.1	.0	40	3.2	16.7	2.8	.0	5.9	3.9	2.8	.0
NE	.4	1.4	1.8	.5	.4	.1	56	4.5	15.8	6.0	.0	3.0	5.0	2.8	3.6
ENE	.2	.6	.6	1.0	.2	.0	30	2.4	18.6	2.5	3.0	2.4	1.7	3.9	.0
E	.3	.9	1.9	1.3	.4	.0	60	4.8	17.9	5.0	6.1	4.7	3.9	4.4	7.1
ESE	.1	.4	1.1	1.1	.2	.0	36	2.9	20.1	3.1	.0	2.4	2.8	3.9	7.1
SE	.2	.9	1.8	1.4	.6	.6	70	5.6	22.9	6.6	9.1	4.7	6.1	3.3	.0
SSE	.1	.4	1.1	1.2	.3	.1	40	3.2	22.7	2.2	.0	3.6	3.3	4.4	.0
S	.4	1.7	1.4	1.7	.2	.1	67	5.3	17.3	3.8	.0	7.7	8.3	4.4	7.1
SSW	.6	1.2	1.2	1.5	.5	.1	63	5.0	18.8	4.7	6.1	6.5	3.9	3.3	10.7
SW	.4	3.3	4.1	1.8	1.1	.1	136	10.8	17.3	11.3	27.3	9.5	14.4	6.1	3.6
WSW	.4	1.7	2.8	1.7	1.4	.2	102	8.1	20.9	8.2	3.0	8.9	5.5	10.0	17.9
W	.7	2.2	3.6	4.1	1.6	.4	159	12.7	21.6	12.6	9.1	7.7	13.3	15.6	17.9
WNW	.2	1.0	1.7	2.9	.6	.5	87	6.9	23.6	7.9	3.0	8.9	2.8	8.9	16.7
NW	.4	3.6	3.7	2.8	1.3	.3	151	12.0	19.0	11.3	24.2	12.4	13.3	12.2	5.6
NNW	.1	1.4	2.6	1.0	.3	.0	67	5.3	16.3	5.0	9.1	3.6	5.0	6.7	7.1
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.8	290	408	327	117	29	22	1.8	.0	1.3	.0	.6	3.9	1.1	.6
TOT OBS	83	23.1	32.5	26.1	9.3	2.3	1254	100.0	19.0	318	33	169	181	180	28
TOT PCT	6.6	23.1	32.5	26.1	9.3	2.3	100.0			100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD	00	03	06	09	12	15	18
N	1.7	2.3	3.1	1.4	.1	108	8.6	16.8	8.5	.0	13.6	7.2	8.9	3.6	11.0
NE	1.4	2.2	2.3	.7	.2	86	6.9	16.8	8.5	.0	5.3	6.6	6.7	3.6	5.8
E	.9	2.7	2.4	1.6	.1	96	7.7	18.7	8.2	6.1	7.1	6.6	8.3	14.3	5.2
SE	1.1	2.2	2.6	2.2	.8	110	8.8	22.8	8.8	9.1	8.3	9.4	7.8	.0	8.4
S	2.0	3.0	3.1	2.0	.2	130	10.4	18.0	8.5	6.1	14.2	12.2	7.8	17.9	10.4
SW	3.6	6.0	4.5	4.1	.8	238	19.0	18.8	19.5	30.3	18.3	19.9	16.1	21.4	19.5
W	2.4	5.0	5.3	5.7	1.1	246	19.6	22.3	20.4	12.1	16.6	16.0	24.4	28.6	23.4
NW	3.1	6.3	4.1	3.3	.6	218	17.4	18.1	16.4	33.3	16.0	18.2	18.9	10.7	15.6
VAR	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.8	372	344	234	49	22	1.8	.0	1.3	.0	.6	3.9	1.1	.0	.6
TOT OBS	225	29.7	27.4	21.1	3.9	1254	100.0	19.0	318	33	169	181	180	28	154
TOT PCT	17.9	29.7	27.4	21.1	3.9	100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GHT)

HOUR	1-3	4-10	11-21	22-33	34-47	48+	CALM	MEAN	PCT FREQ	TOTAL OBS
0000	4.8	25.4	33.0	23.9	8.3	3.4	1.1	18.7	100.0	351
0600	8.6	26.6	30.3	22.6	8.0	1.7	2.3	17.1	100.0	350
1200	1.0	11.1	35.1	35.1	14.4	2.4	1.0	23.4	100.0	208
1800	3.5	24.6	32.8	26.4	8.7	1.7	2.3	18.6	100.0	345
TOT	61	290	408	327	117	29	22	19.0		1254
7-T	4.9	23.1	32.5	26.1	9.3	2.3	1.8		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8-10	TOTAL OBS	MEAN CLOUD COVER
N	.6	1.1	2.2	2.2	33	5.9
NNE	.6	.2	1.1	1.5	18	5.9
NE	.2	.6	1.1	1.5	18	6.7
ENE	.4	.0	.4	2.4	17	6.9
E	.2	.4	.9	2.8	23	7.0
ESE	.2	.0	.7	1.7	14	7.1
SE	.0	.0	1.1	3.5	25	7.6
SSE	.2	.0	.4	3.0	19	7.4
S	.6	.2	1.5	2.6	26	6.8
SSW	.4	.4	2.2	3.2	33	6.7
SW	.7	.7	2.2	3.9	41	6.2
WSW	.7	1.9	3.5	3.2	50	5.9
W	2.2	4.3	4.7	3.4	78	5.1
WNW	1.1	2.0	4.1	2.2	51	5.4
NW	1.3	1.7	5.2	2.2	56	5.4
NNW	.7	1.1	2.6	1.3	31	5.4
VAR	.0	.0	.0	.0	0	.0
CALM	.0	.0	.4	.4	4	7.3
TOT OBS	54	78	185	220	537	6.0
TOT PCT	10.1	14.5	34.5	41.0	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT>NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.4	.2	.7	1.3	1.1	.2	.0	.0	.0	.0	2.2	33
NNE	.0	.0	.2	.6	.6	1.3	.0	.0	.0	.0	.7	18
NE	.4	.0	.4	.7	.4	.2	.0	.0	.0	.0	1.3	18
ENE	.2	.0	.6	.9	.7	.4	.0	.0	.0	.0	.4	17
E	.7	.0	.4	.9	.2	.0	.0	.6	.0	.0	1.5	23
ESE	.6	.0	.0	.0	1.7	.2	.0	.0	.0	.0	.2	14
SE	1.1	.0	.6	.7	.9	.6	.0	.0	.0	.0	.7	25
SSE	.0	.0	.4	1.3	1.1	.4	.0	.2	.0	.0	.2	19
S	.0	.2	.6	.6	1.7	.7	.2	.0	.0	.0	.9	26
SSW	.7	.0	.0	1.1	2.2	.4	.2	.0	.0	.0	1.5	33
SW	1.1	.0	.6	.4	2.8	.2	.4	.0	.0	.0	2.2	41
WSW	.4	.0	.4	1.5	3.0	.4	.0	.2	.0	.0	3.5	50
W	.2	.0	.4	2.4	3.2	.9	.0	.2	.0	.0	7.3	78
WNW	.4	.0	.6	1.3	1.9	1.3	.4	.0	.0	.0	3.7	51
NW	.7	.0	.2	.4	2.4	2.3	.0	.0	.0	.0	3.9	56
NNW	.2	.0	.0	1.1	.7	1.5	.0	.0	.4	.0	1.9	31
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.0	.0	.0	.0	.2	.4	.2	.0	.0	.0	.0	4
TOT OBS	38	2	31	82	133	63	7	6	2	0	173	537
TOT PCT	7.1	.4	5.8	15.3	24.8	11.7	1.3	1.1	.4	.0	32.2	100.0

PERIOD: (PRIMARY) 1943-1969  
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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	.2	.4	.4	.4	.4	.4	.4	.4
= OR >5000	.7	1.1	1.5	1.5	1.5	1.5	1.5	1.5
= OR >3500	1.3	2.4	2.8	2.8	2.8	2.8	2.8	2.8
= OR >2000	8.7	13.2	14.5	14.5	14.5	14.5	14.5	14.5
= OR >1000	20.4	34.5	37.8	39.0	39.1	39.1	39.1	39.1
= OR >600	26.2	47.9	52.3	54.2	54.5	54.7	54.7	54.7
= OR >300	28.0	51.6	57.3	59.7	60.1	60.5	60.5	60.5
= OR >150	28.0	51.9	57.7	60.1	60.5	60.9	60.9	60.9
= OR > 0	28.4	53.6	61.6	65.1	66.2	67.2	67.9	67.9
TOTAL	153	289	332	351	357	362	366	366

TOTAL NUMBER OF OBS: 539 PCT FREQ NH <5/8: 32.1

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)								
	0	1	2	3	4	5	6	7
								8
								OBSCD
								TOTAL
								OBS
2.6	3.3	10.6	7.8	9.3	11.2	11.6	11.4	26.3
								5.9
								578

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NMW	VAR	CALM	TOTAL	PCT
PCP	.0	.0	.1	.0	.2	.1	.1	.1	.0	.0	.2	.1	.0	.1	.1	.0	.0	.0	11	1.4
NO PCP	.0	.0	.0	.0	.0	.1	.1	.0	.0	.1	.0	.0	.0	.0	.1	.0	.0	.0	7	.9
TOTAL	0	0	1	0	2	2	2	1	0	1	5	1	0	1	2	0	0	0	18	2.2
PCP	.1	.1	.1	.0	.0	.1	.0	.1	.1	.5	.1	.0	.2	.1	.0	.0	.0	.0	14	1.7
NO PCP	.0	.0	.0	.1	.0	.0	.1	.1	.1	.1	.0	.0	.1	.0	.1	.0	.0	.0	7	.9
TOTAL	1	1	1	1	0	1	1	2	2	5	1	0	3	1	1	0	0	0	21	2.6
PCP	.2	.2	.2	.0	.5	.5	.7	.4	.7	.1	.9	.5	.1	.2	.4	.1	.0	.1	49	6.1
NO PCP	.0	.0	.1	.5	.1	.1	.1	.1	.0	.0	.0	.1	.4	.2	.0	.1	.0	.0	16	2.0
TOTAL	2	2	3	4	5	5	7	4	6	1	7	5	4	4	3	2	0	1	65	9.0
PCP	.2	.0	.1	.2	.6	.9	1.1	.5	.6	.1	.4	.5	.5	.4	.4	.0	.0	.1	54	6.7
NO PCP	.1	.0	.1	.4	.2	.0	.9	.2	.4	.7	.7	.6	.7	.2	.6	.4	.0	.0	52	6.4
TOTAL	3	0	2	5	7	7	16	6	8	7	9	9	10	5	8	3	0	1	106	13.1
PCP	.5	.0	.5	.2	.1	.2	.4	.9	.2	.5	1.0	.9	1.7	1.0	2.0	.2	.0	.1	85	10.5
NO PCP	.9	.9	.6	.7	.7	.7	1.0	.6	1.6	1.2	3.0	2.6	4.2	1.6	2.5	1.2	.0	.4	198	24.5
TOTAL	11	7	9	8	7	8	11	12	15	14	32	28	48	21	36	12	0	4	283	35.0
PCP	.5	.0	.0	.1	.1	.0	.1	.0	.2	.1	.4	.4	.7	.6	.7	.4	.0	.1	37	4.6
NO PCP	3.0	1.5	1.2	.7	1.6	.5	.7	1.1	1.6	1.9	1.7	3.8	5.3	3.5	3.8	2.2	.0	.1	278	34.4
TOTAL	28	12	10	7	14	4	7	9	15	16	17	34	49	33	37	21	0	2	315	39.0
TOTAL	45	22	26	25	35	27	44	34	46	44	71	77	114	65	87	38	0	8	808	100.0
PCT	5.6	2.7	3.2	3.1	4.3	3.3	5.4	4.2	5.7	5.4	8.8	9.5	14.1	8.0	10.8	4.7	.0	1.0	100.0	



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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	1	.1
	4-10	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1	.1
	11-21	.0	.0	.0	.0	.1	.1	.1	.0	.1	.0	.3	.0	.0	.0	.1	.0	.0	.0	9	.7
	22+	.0	.0	.1	.0	.2	.1	.0	.1	.0	.1	.1	.1	.0	.1	.2	.0	.0	.0	11	.9
	TOTAL	0	0	1	0	3	2	2	1	1	1	5	1	0	1	4	0	0	0	22	1.8
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0	.0	2	.2
	4-10	.0	.1	.0	.1	.0	.0	.0	.0	.2	.1	.1	.1	.0	.1	.0	.0	.0	.0	7	.6
	11-21	.1	.1	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	.2
	22+	.1	.0	.1	.0	.0	.1	.1	.2	.1	.3	.0	.0	.3	.0	.1	.0	.0	.0	16	1.3
	TOTAL	2	2	1	1	0	2	1	2	3	5	1	1	5	1	1	0	0	0	28	2.3
1<2	0-3	.0	.0	.1	.2	.0	.1	.0	.0	.1	.0	.0	.1	.2	.0	.0	.0	.0	.1	9	.7
	4-10	.1	.0	.0	.0	.0	.1	.1	.1	.2	.2	.4	.2	.2	.0	.2	.2	.0	.0	24	1.9
	11-21	.1	.1	.1	.0	.2	.2	.3	.2	.1	.0	.6	.0	.2	.1	.2	.0	.0	.0	27	2.2
	22+	.1	.2	.2	.2	.3	.2	.4	.1	.2	.0	.2	.2	.4	.2	.3	.0	.0	.0	40	3.2
	TOTAL	3	3	4	4	6	7	10	4	7	3	14	7	12	4	9	2	0	1	100	8.0
2<5	0-3	.0	.1	.0	.0	.1	.0	.0	.1	.0	.2	.2	.0	.2	.1	.1	.0	.0	.6	20	1.6
	4-10	.4	.0	.2	.0	.2	.1	.2	.1	.2	.1	.3	.6	.2	.3	.3	.4	.0	.0	47	3.8
	11-21	.0	.1	.0	.2	.2	.4	.5	.1	.4	.2	.5	.2	.3	.0	.5	.2	.0	.0	46	3.7
	22+	.2	.0	.1	.4	.2	.2	1.1	.6	.3	.2	.2	.2	.7	.2	.5	.2	.0	.0	69	5.5
	TOTAL	7	2	4	7	10	9	23	10	12	9	15	12	18	8	17	11	0	8	182	14.6
5<10	0-3	.2	.0	.2	.0	.2	.0	.1	.0	.2	.0	.2	.2	.2	.1	.1	.0	.0	.7	31	2.5
	4-10	.3	.5	.5	.2	.1	.2	.2	.2	.4	.5	1.6	.2	.6	.2	1.0	.1	.0	.0	83	6.7
	11-21	.9	.3	.9	.2	.3	.2	.4	.3	.3	.5	.9	1.0	1.0	.5	1.4	.8	.0	.0	123	9.9
	22+	.3	.3	.2	.4	.3	.4	.6	.6	.7	1.0	1.7	1.4	3.0	1.4	1.4	.5	.0	.0	180	14.5
	TOTAL	21	14	23	10	11	10	16	13	21	24	35	35	60	26	52	17	0	9	417	33.5
10+	0-3	.1	.0	.1	.0	.1	.0	.2	.0	.1	.2	.0	.1	.1	.1	.2	.1	.0	.3	19	1.5
	4-10	.7	.5	.6	.3	.6	.1	.2	.1	.7	.4	.9	.6	1.2	.5	2.1	.8	.0	.0	127	10.2
	11-21	1.0	.6	.8	.2	1.1	.2	.6	.6	.4	.6	1.8	1.7	2.1	1.1	1.5	1.5	.0	.0	197	15.8
	22+	.9	.4	.3	.2	.6	.2	.5	.2	.5	.5	.8	1.4	1.8	2.0	1.5	.6	.0	.0	152	12.2
	TOTAL	34	19	23	8	29	6	17	10	21	21	44	46	64	46	66	37	0	4	495	39.8
TOTAL		67	40	56	30	59	36	69	40	65	63	134	102	159	86	149	67	0	22	1244	100.0
PCT		5.4	3.2	4.5	2.4	4.7	2.9	5.5	3.2	5.2	5.1	10.8	8.2	12.8	6.9	12.0	5.4	.0	1.8	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET,NH >4/8),AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL DBS
00003	7.7	.0	4.6	20.0	22.3	11.5	1.5	1.5	.0	.0	69.2	30.8	130
06009	8.0	.7	5.3	14.7	22.0	12.0	.0	.7	.0	.0	63.3	36.7	150
12015	5.2	.6	5.8	10.3	21.9	12.9	1.9	1.9	1.3	.0	61.9	38.1	155
18021	6.4	.0	6.4	16.0	29.6	8.0	1.6	.0	.0	.0	68.0	32.0	125
TOT	38	2	31	84	133	63	7	6	2	0	366	194	560
PCT	6.8	.4	5.5	15.0	23.8	11.3	1.3	1.1	.4	.0	65.4	34.6	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL DBS
00003	4.0	1.6	2.4	8.7	28.6	54.8	126
06009	2.1	2.1	4.2	8.3	29.9	53.5	144
12015	.0	.7	4.7	8.1	33.6	53.0	149
18021	.8	.0	3.3	7.5	40.8	47.5	120
TOT	9	6	20	44	178	282	539
PCT	1.7	1.1	3.7	8.2	33.0	52.3	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET,NH >4/8),BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND5+	NH <5/8 AND 5+	TOTAL DBS
00003	7.9	14.3	37.3	34.9	27.8	126
06009	8.3	15.3	34.7	31.3	34.0	144
12015	5.4	12.1	29.5	34.9	35.6	149
18021	6.7	13.3	34.2	37.5	28.3	120
TOT	38	74	182	186	171	539
PCT	7.1	13.7	33.8	34.5	31.7	100.0

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TABLE 13

TEMP F	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP								TOTAL OBS	PCT FREQ
	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100		
50/54	.0	.0	.0	.0	.1	.2	.3	.2	8	.8
45/49	.0	.0	.1	.2	.6	2.1	3.3	5.6	122	11.9
40/44	.0	.0	.0	.2	4.3	7.1	13.4	22.5	488	47.5
35/39	.0	.0	.0	1.5	4.0	5.3	9.4	13.5	346	33.7
30/34	.0	.0	.0	.0	.3	1.0	1.9	2.6	60	5.8
25/29	.0	.0	.0	.0	.0	.1	.0	.2	3	.3
TOTAL	0	0	1	19	95	162	292	458	1027	100.0
PCT	.0	.0	.1	1.9	9.3	15.8	28.4	44.6		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP										
N	NE	E	SE	S	SW	W	NW	VAR	CALM	
.0	.0	.0	.0	.2	.4	.1	.1	.0	.0	
.2	.5	.7	2.5	2.4	3.1	1.7	.5	.0	.3	
3.3	4.1	4.6	4.6	5.9	10.6	7.4	5.6	.0	1.4	
3.7	2.2	2.0	1.0	2.2	5.2	8.5	8.6	.0	.3	
.8	.3	.2	.1	.1	.1	2.4	1.9	.0	.0	
.0	.0	.0	.0	.0	.0	.1	.2	.0	.0	
82	73	77	84	112	199	207	173	0	20	
8.0	7.1	7.5	8.2	10.9	19.4	20.2	16.8	.0	1.9	

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR										
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS	
00003	51	50	47	41	34	31	30	40.7	350	
06009	51	49	46	40	34	30	30	40.3	350	
12015	49	48	45	39	34	32	32	39.4	210	
18021	50	48	46	40	33	28	28	39.8	345	
TOT	51	49	46	40	34	30	28	40.1	1255	

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR										
HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS		
00003	.0	1.7	8.7	14.7	27.3	47.6	86	286		
06009	.0	2.8	8.7	17.3	26.0	45.3	85	289		
12015	.0	3.0	13.4	14.6	38.4	30.5	82	164		
18021	.0	.7	8.2	15.6	26.5	49.0	86	294		
TOT	0	20	96	162	294	461	85	1033		

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	25	29	33	37	41	45	49	TOT	W	WD
	28	32	36	40	44	48	52		FOG	FOG
7/8	.0	.0	.0	.0	.1	.1	.1	3	.1	.3
6	.0	.0	.0	.0	.0	.1	.1	2	.0	.3
5	.0	.0	.0	.1	.3	1.6	.3	16	.3	2.0
4	.0	.0	.0	.6	.6	1.5	.0	18	.3	2.3
3	.0	.0	.0	.1	1.5	1.6	.0	22	.4	2.8
2	.0	.0	.0	.0	2.5	1.8	.0	29	.1	4.1
1	.0	.0	.0	.3	4.7	1.3	.1	44	.3	6.1
0	.0	.0	.0	2.3	6.3	3.1	.0	80	.6	11.1
-1	.0	.0	.0	2.2	4.8	.3	.0	50	.3	7.0
-2	.0	.0	.3	5.7	5.8	.1	.0	82	.3	11.7
-3	.0	.0	.1	5.7	3.1	.1	.0	62	.0	9.1
-4	.0	.0	1.5	5.4	3.2	.0	.0	69	.0	10.1
-5	.0	.0	2.8	5.1	.6	.3	.0	60	.0	8.8
-6	.0	.3	2.3	2.9	.7	.0	.0	43	.1	6.1
-7/-8	.0	.9	3.7	3.7	.7	.0	.0	61	.1	8.8
-9/-10	.1	.4	2.5	1.2	.0	.0	.0	29	.0	4.2
-11/-13	.0	.4	.7	.4	.0	.0	.0	11	.0	1.6
-14/-16	.0	.3	.1	.0	.0	.0	.0	3	.0	.4
TOTAL	1	16	96	245	239	82	5	684	21	663
PCT	.1	2.3	14.0	35.8	34.9	12.0	.7	100.0	3.1	96.9

PCT FREQ OF WINI SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N					NE					48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47		
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
1-2	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0	.0	0
3-4	.0	.0	.0	1.0	.0	.0	.0	.5	.0	.0	.0	2
5-6	.0	.0	1.0	1.0	.0	.0	.0	1.5	.0	.0	.0	4
7	.0	.0	.5	.0	.0	.0	.0	.0	1.5	.0	.0	1
8-9	.0	.0	.0	.5	.0	.0	.0	.0	1.0	.5	.0	1
10-11	.0	.0	.0	.0	.0	.0	.0	.0	1.0	.0	.0	0
12	.0	.0	.5	.0	.0	.0	.0	.0	2.0	.0	.0	1
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.5	1.0	.5	3
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	0	0	4	5	0	0	1	4	13	5	1	24
PCT	.0	.0	2.0	2.5	.0	.0	.5	2.0	6.5	2.5	.5	11.9

HGT	E					SE					48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47		
<1	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
1-2	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	0
3-4	.0	.0	.0	.5	.0	.0	.0	.0	.5	.0	.0	1
5-6	.0	.0	.5	1.5	.0	.0	.0	.0	.0	.5	.0	1
7	.0	.0	1.0	2.0	.0	.0	.0	.5	.5	.0	.0	2
8-9	.0	.0	.0	1.5	.0	.0	.0	.0	.0	.5	.0	1
10-11	.0	.0	.0	.5	.0	.0	.0	.0	.0	.5	.0	1
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
13-16	.0	.0	.0	.5	.0	.0	.0	.0	1.0	.5	.0	3
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	0	1	4	13	0	0	0	1	4	4	0	9
PCT	.0	.5	2.0	6.5	.0	.0	.0	.5	2.0	2.0	.0	4.5

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TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S										SW										TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+								
<1	.5	.0	.0	.0	.0	.0	1	.0	.0	.0	.0	.0	.0	0							
1-2	.0	1.5	.5	.0	.0	.0	4	.0	1.0	.5	.0	.0	.0	3							
3-4	.0	.0	.5	.5	.0	.0	2	.0	.5	1.5	.5	.0	.0	5							
5-6	.0	.0	.5	.5	.0	.0	2	.0	.0	.5	.5	.0	.0	2							
7	.0	.0	.5	1.5	.0	.0	4	.0	.5	.5	1.0	.0	.0	4							
8-9	.0	.0	.5	1.5	.0	.0	4	.0	.0	3.0	1.5	.5	.0	10							
10-11	.0	.0	.0	1.0	.5	.0	3	.0	.0	1.0	.0	.0	.0	2							
12	.0	.0	.0	.5	.0	.0	1	.0	.0	.5	.0	.0	.0	1							
13-16	.0	.0	.0	.0	.0	.5	1	.0	.0	.5	.5	1.0	.5	5							
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0							
20-22	.0	.0	.0	.0	.0	.5	1	.0	.0	.0	.0	.5	.0	1							
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.5	.0	.0	1							
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.5	1							
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0							
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0							
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0							
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0							
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0							
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0							
TOTAL	1	3	5	11	1	2	23	0	4	16	9	4	2	35							
PCT	.5	1.5	2.5	5.5	.5	1.0	11.4	.0	2.0	8.0	4.5	2.0	1.0	17.4							

HGT	W										NW										TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+								
<1	.0	.5	.0	.0	.0	.0	1	.0	.5	.0	.0	.0	.0	1							
1-2	.0	1.0	.0	.0	.0	.0	2	.0	1.0	1.0	.0	.0	.0	4							
3-4	.0	1.5	1.0	1.0	.0	.0	7	.0	.5	4.5	.0	.0	.0	10							
5-6	.0	.5	4.0	1.0	.0	.0	11	.0	.5	3.5	1.5	.0	.0	11							
7	.0	.0	1.5	1.5	.0	.0	6	.0	.0	1.5	.5	.0	.0	4							
8-9	.0	.0	.0	1.0	.0	.0	2	.0	.0	.5	1.5	.0	.0	4							
10-11	.0	.0	.0	2.0	.5	.0	5	.0	.0	.5	.5	.0	.0	2							
12	.0	.0	1.0	.0	.0	.0	2	.0	.0	.0	.0	.0	.0	0							
13-16	.0	.0	.0	2.0	.5	.0	5	.0	.0	.0	.0	.0	.0	0							
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0							
20-22	.0	.0	.0	.5	.0	.0	1	.0	.0	.0	.0	.0	.0	0							
23-25	.0	.0	.0	.5	.0	.0	2	.0	.0	.0	.0	.0	.0	0							
26-32	.0	.0	.0	.0	1.0	.5	3	.0	.0	.0	.0	.0	.0	0							
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0							
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0							
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0							
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0							
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0							
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0							
TOTAL	0	7	15	19	5	1	47	0	5	23	8	0	0	36							
PCT	.0	3.5	7.5	9.5	2.5	.5	23.4	.0	2.5	11.4	4.0	.0	.0	17.9							

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PERIOD: (PRIMARY) 1963-1969  
(OVER-ALL)

NOVEMBER

AREA 0009 ADAK  
51-55N 172-180W

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	1.0	1.5	.0	.0	.0	.0					5
1-2	.0	4.9	2.5	.0	.0	.0					15
3-4	.5	2.5	7.9	3.9	.0	.0					30
5-6	.0	1.0	11.3	5.9	.5	.0					38
7	.0	.5	5.9	8.4	.0	.0					30
8-9	.0	.0	3.9	8.4	1.5	.0					28
10-11	.0	.0	1.5	4.9	2.5	.0					18
12	.0	.0	2.0	2.5	.0	.0					9
13-16	.0	.0	.5	4.4	2.0	1.0					16
17-19	.0	.0	.0	.0	.0	.0					0
20-22	.0	.0	.0	.5	1.5	1.0					6
23-25	.0	.0	.0	1.5	.5	.0					4
26-32	.0	.0	.0	.0	1.0	1.0					4
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	3	21	72	82	19	6					203
PCT	1.5	10.3	35.5	47.4	9.4	3.0					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+ TOTAL	MEAN HGT	
<6	.4	2.6	5.7	3.9	2.2	.4	2.2	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	42	5
6-7	.0	.0	2.6	4.3	7.0	3.5	1.7	.9	.9	.9	.9	.0	.0	.0	.0	.0	.0	.0	.0	52	7
8-9	.0	.0	.0	3.5	4.3	3.9	2.2	1.3	3.5	1.7	.9	2.6	.0	.0	.0	.0	.0	.0	.0	55	11
10-11	.0	.0	.0	.4	.9	3.9	2.2	1.3	2.2	.4	.0	.0	1.7	.0	.0	.0	.0	.0	.0	30	12
12-13	.0	.0	.0	.0	.9	1.3	2.2	2.6	.4	.0	.9	.0	.0	.0	.0	.0	.0	.0	.0	19	10
>13	.0	.0	.0	.0	.0	.0	.0	1.3	3.5	.0	.4	.9	.4	.0	.0	.0	.0	.0	.0	15	16
INDET	7.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	17	0
TOTAL	18	6	19	28	35	30	24	19	24	7	7	8	5	0	0	0	0	0	0	230	9
PCT	7.8	2.6	8.3	12.2	15.2	13.0	10.4	8.3	10.4	3.0	3.0	3.5	2.2	.0	.0	.0	.0	.0	.0	100.0	

DECEMBER

PERIOD: (PRIMARY) 1942-1969  
(OVER-ALL) 1900-1969

AREA 0009 ADAK  
51-55N 172-180W

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FOG WD PCPN	SMOKE HAZE	DUST BLWG	NO SIG WEA	
N	.5		.5	.0	1.7	.0	.0	.0	21	.0	.0	.2	.0	3.4	50
NNE	.2	.0	.0	.0	1.4	.0	.0	.0	12	.0	.0	.0	.0	2.7	34
NE	1.0	.6	2.0	.0	1.1	.0	.0	.0	30	.0	.2	.0	.0	3.1	57
ENE	.7	.0	.4	.0	.9	.0	.1	1.9	15	.0	.0	.0	.0	2.5	35
E	1.5	.0	1.4	.0	.7	.0	.4	4.0	32	.0	.4	.0	.0	5.0	75
ESE	.5	.2	.7	.0	.4	.0	.0	1.9	15	.0	.4	.0	.0	2.0	34
SE	2.6	.4	.7	.0	.7	.0	.0	4.4	35	.0	.1	.0	.0	2.4	55
SSE	.4	.1	.7	.0	.1	.0	.0	1.4	11	.0	.2	.0	.0	3.0	37
S	.6	.0	.6	.0	.5	.0	.0	1.7	14	.0	.1	.1	.0	3.7	46
SSW	.1	.1	.2	.0	.0	.0	.0	.5	4	.0	.1	.0	.0	3.2	31
SW	.6	.2	.5	.0	.2	.0	.1	1.7	14	.0	.1	.0	.0	4.2	49
WSW	.4	.2	.1	.0	2.1	.0	.1	2.7	22	.0	.1	.0	.0	5.4	66
W	.9	.5	.4	.0	.9	.0	.0	3.2	18	.0	.2	.0	.0	8.7	90
WNW	.2	.0	.1	.0	.6	.0	.1	1.1	9	.0	.0	.0	.0	4.7	47
NW	.1	.1	.0	.0	1.4	.0	.1	1.5	12	.1	.2	.0	.0	3.6	44
NNW	.2	.0	.1	.0	1.0	.0	.1	1.4	11	.0	.0	.1	.0	3.5	40
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.1	.0	.0	1.2	11
TOT OBS	86	22	69	0	111	0	9	.0	275	1	20	4	0	501	801
TOT PCT	10.7	2.7	8.6	.0	13.9	.0	1.1	34.3		.1	2.5	.5	.0	62.5	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FOG WD PCPN	SMOKE HAZE	DUST BLWG	NO SIG WEA	
00003	13.4	4.9	9.8	.0	18.8	.0	.9	44.2	99	.0	3.1	.4	.0	52.2	224
06009	11.1	2.4	9.1	.0	14.4	.0	1.0	37.0	77	.5	4.3	.5	.0	57.7	208
12015	4.4	2.8	6.7	.0	6.7	.0	2.8	20.0	36	.0	1.7	.0	.0	78.3	180
18021	13.4	.5	8.8	.0	13.9	.0	.0	33.5	65	.0	1.0	1.0	.0	64.4	194
TOT	87	22	70	0	111	0	9	34.4	277	1	21	4	0	503	806
PCT	10.8	2.7	8.7	.0	13.8	.0	1.1			.1	2.6	.5	.0	62.4	100.0



DECEMBER

PERIOD: (PRIMARY) 1942-1969  
(OVER-ALL) 1900-1969

AREA 0009 ADAK  
51-55N 172-180W

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+	41+	28-40	17-27	7-16				00	03	06	09	12	15	18	21
N	1.0	2.0	2.4	.7	.4	.0	.4	1.8	2.4	2.0	81	6.4	14.4	7.1	3.3	4.2	6.7	5.3	2.7	7.4	8.1
NNE	.3	1.1	1.2	1.8	.4	.0	.4	1.8	1.2	1.1	60	4.8	19.0	4.2	23.3	3.5	4.8	3.6	2.7	5.4	4.9
NE	.4	2.5	2.6	2.7	.4	.0	.4	2.7	2.6	2.5	109	8.7	17.3	8.9	3.3	7.0	10.6	6.5	8.1	8.1	10.8
ENE	.1	1.9	1.4	.9	.3	.0	.3	.9	1.4	1.9	58	4.6	16.1	5.0	.0	5.6	3.8	3.0	5.4	5.4	5.4
E	.3	2.0	4.3	1.2	1.2	.0	.3	1.2	4.3	2.0	113	9.0	18.3	9.5	6.7	9.8	12.0	9.5	8.1	6.1	6.5
ESE	.3	.5	1.9	.7	.5	.0	.5	.7	1.9	.5	49	3.9	18.6	5.3	6.7	2.8	4.3	2.4	5.4	2.0	3.8
SE	.4	1.7	2.5	1.4	1.0	.0	.4	1.4	2.5	1.7	88	7.0	19.3	7.4	.0	9.1	6.7	3.6	.0	5.4	11.9
SSE	.1	.6	1.7	1.0	.6	.1	.6	1.0	1.7	.6	49	3.9	21.3	3.3	.0	4.2	3.4	5.9	10.8	5.4	1.6
S	.4	1.8	1.8	.6	.6	.2	.6	.6	1.8	.9	68	5.4	16.7	6.5	.0	9.8	4.3	4.1	10.8	4.7	2.7
SSW	.4	.8	.9	1.4	.6	.0	.6	.9	.8	.8	50	4.0	19.5	4.2	6.7	2.8	5.8	3.0	2.7	4.1	3.2
SW	.5	2.5	1.9	1.8	1.0	.1	1.0	1.8	2.1	2.5	97	7.7	17.9	8.3	10.0	5.6	6.7	8.3	2.7	4.1	12.4
WSW	.2	1.8	2.1	2.4	.3	.2	.3	2.4	3.2	3.1	89	7.1	19.9	8.3	3.3	7.0	5.3	10.8	6.8	5.9	5.9
W	.6	3.1	3.2	2.5	1.4	.4	1.4	3.2	3.2	3.1	142	11.3	19.5	10.7	10.0	11.2	11.1	14.8	16.2	12.8	7.6
WNW	.2	1.3	1.9	1.4	.2	.2	.2	1.4	1.9	1.3	64	5.1	18.7	3.0	16.7	4.9	4.3	8.3	8.1	6.1	3.8
NW	.2	1.6	2.5	.6	.4	.0	.4	.6	2.5	1.6	67	5.3	15.1	2.4	6.7	7.0	6.7	5.3	.0	7.4	7.0
NNW	.1	1.5	1.6	.8	.2	.0	.2	.8	1.6	1.5	53	4.2	16.2	3.9	3.3	4.2	3.4	6.5	5.4	6.1	2.2
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.6	335	427	274	119	14	119	274	427	335	20	1.6	.0	2.1	.0	1.4	.0	1.8	.0	2.7	2.2
TOT OBS	88	26.7	34.0	21.8	9.5	1.1	9.5	21.8	34.0	26.7	1257	100.0	17.8	337	30	143	208	169	37	148	185
TOT PCT	7.0	26.7	34.0	21.8	9.5	1.1	9.5	21.8	34.0	26.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-6	7-16	17-27	28-40	41+	28-40	17-27	7-16	0-6	00				00	03	06	09	12	15	18	21
N	2.5	3.8	2.8	2.0	.2	2.0	2.8	3.8	2.5	11.3	141	11.2	16.3	11.3	26.7	7.7	11.5	8.9	5.4	12.8	13.0
NE	2.3	5.0	3.7	2.2	.1	2.2	3.7	5.0	2.3	13.9	167	13.3	16.9	13.9	3.3	12.6	14.4	9.5	13.5	13.5	16.2
E	1.8	4.1	4.8	1.9	.2	1.9	4.8	4.1	1.8	14.8	162	12.9	18.4	14.8	13.3	12.6	16.3	11.8	13.5	8.1	10.3
SE	1.5	3.3	3.0	2.5	.6	2.5	3.0	3.3	1.5	10.7	137	10.9	20.0	10.7	.0	13.3	10.1	9.5	10.8	10.8	13.5
S	1.8	3.6	1.8	2.0	.3	2.0	1.8	3.6	1.8	10.7	118	9.4	17.9	10.7	6.7	12.6	10.1	7.1	13.5	8.8	5.9
SW	2.5	4.2	4.8	2.5	.7	2.5	4.8	4.2	2.5	16.6	186	14.8	18.9	16.6	13.3	12.6	12.0	16.6	13.5	10.8	18.4
W	2.1	5.7	4.8	2.8	1.0	2.8	4.8	5.7	2.1	13.6	206	16.4	19.3	13.6	26.7	16.1	15.4	23.1	18.9	11.4	11.4
NW	1.4	4.6	2.4	.9	.2	.9	2.4	4.6	1.4	6.2	120	9.5	15.6	6.2	10.0	11.2	10.1	11.8	5.4	13.5	9.2
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	1.6	432	351	211	43	211	351	432	1.6	2.1	20	1.6	.0	2.1	.0	1.4	.0	1.8	.0	2.7	2.2
TOT OBS	220	34.4	27.9	16.8	3.4	16.8	27.9	34.4	220	337	1257	100.0	17.8	337	30	143	208	169	37	148	185
TOT PCT	17.5	34.4	27.9	16.8	3.4	16.8	27.9	34.4	17.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

DECEMBER

PERIOD: (PRIMARY) 1942-1969  
(OVER-ALL) 1900-1969

AREA 0009 ADAK  
51-55N 172-180W

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	WIND SPEED (KNOTS)						CALM	MEAN	PCT FREQ	TOTAL OBS
	1-3	4-10	11-21	22-33	34-47	48+				
00003	4.1	25.3	34.9	22.3	10.6	.8	1.9	18.2	100.0	367
06004	7.7	29.6	30.2	19.4	11.1	1.4	.6	17.4	100.0	351
12015	1.0	18.4	39.3	28.2	9.7	1.9	1.7	20.4	100.0	206
18021	7.2	30.0	33.6	19.8	6.3	.6	2.4	16.0	100.0	333
TOT	68	135	147	274	119	14	20	17.8		1257
PCT	5.4	26.7	34.0	21.8	9.5	1.1	1.6		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

BY WIND DIRECTION

WIND DIR	PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)								TOTAL OBS	MEAN CLOUD COVER
	0-2	3-4	5-7	8	8	8	8	8		
N	.0	.6	3.0	1.9	26	6.6				
NNE	.8	.6	.8	2.1	21	5.5				
NE	.4	.4	2.1	3.2	29	6.7				
ENE	.0	.4	1.1	3.2	22	7.3				
E	.6	.6	1.5	4.2	33	6.5				
ESE	.0	.0	.0	1.7	8	8.0				
SE	.0	.4	1.1	3.4	23	7.3				
SSE	.6	.2	.6	3.2	22	6.7				
S	.4	.4	1.5	4.0	30	6.9				
SSW	.8	.6	2.1	1.5	24	5.5				
SW	.8	1.5	3.2	2.8	39	5.5				
WSW	2.2	1.5	1.7	2.3	37	4.9				
W	3.0	2.5	4.2	4.5	67	5.2				
WNW	1.1	1.1	2.5	1.7	30	5.3				
NW	1.1	1.1	2.1	1.5	27	5.3				
NNW	.2	1.7	1.5	1.5	23	5.7				
VAR	.0	.0	.0	.0	0	.0				
CALM	1.5	.0	.4	.2	10	2.2				
TOT OBS	65	65	139	202	471	5.9				
TOT PCT	13.8	13.8	29.5	42.9	100.0					

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT) NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT) NH >4/8)										AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION										NH <5/8 ANY HGT	TOTAL OBS
	000	149	150	299	300	599	600	999	3500	4999	5000	6499	7999	8000+	8000+	8000+	8000+	8000+	8000+	8000+		
N	.6	.4	.0	.0	.6	.2	1.1	1.1	.4	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.1	26
NNE	.4	.4	.0	.0	.2	.4	.8	.8	.4	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.5	21
NE	.4	.2	.0	.0	.4	.4	.4	.4	.4	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.1	29
ENE	.2	.2	.0	.0	.2	.2	1.1	1.9	.4	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	22
E	.6	.6	.0	.0	.8	.8	1.1	1.3	1.1	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.5	33
ESE	.2	.2	.0	.0	.4	.4	.0	.6	.4	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	8
SE	.8	.6	.0	.0	.0	.0	1.7	.6	.4	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	23
SSE	.6	.6	.0	.0	.4	.4	1.1	1.3	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	22
S	.6	.6	.0	.0	.6	.6	1.9	2.1	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	30
SSW	.2	.2	.0	.0	.8	.8	.4	.4	1.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.9	24
SW	.6	.6	.0	.0	.4	.4	1.9	1.3	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.2	39
WSW	.4	.4	.0	.0	.0	.0	.4	1.1	1.5	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.2	37
W	.4	.4	.0	.0	.2	.2	2.5	2.1	1.3	.6	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	6.8	67
WNW	.4	.4	.2	.2	.0	.0	.8	2.1	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.3	30
NW	.2	.2	.0	.0	.2	.2	.0	2.1	.8	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.3	27
NNW	.0	.0	.0	.0	.0	.0	1.3	1.1	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.1	23
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.0	.0	.0	.0	.0	.0	.2	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.5	10
TOT OBS	33	33	1	1	26	79	112	112	49	15	2	2	2	0	0	0	0	0	0	0	154	471
TOT PCT	7.0	7.0	.2	.2	5.5	16.8	23.8	23.8	10.4	3.2	.4	.4	.4	.0	.0	.0	.0	.0	.0	.0	32.7	100.0

PERIOD: (PRIMARY) 1942-1969  
(OVER-ALL) 1900-1969

DECEMBER

AREA 0009 ADAK  
51-55N 172-180W

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)									
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0		
= OR >6500	.0	.0	.0	.0	.0	.0	.0	.0		
= OR >5000	.2	.4	.4	.4	.4	.4	.4	.4		
= OR >3500	1.7	3.0	3.0	3.2	3.2	3.6	3.6	3.6		
= OR >2000	6.8	12.3	13.0	13.2	13.2	13.6	13.8	13.8		
= OR >1000	20.6	33.4	36.4	37.0	37.0	37.4	37.7	37.7		
= OR >600	27.9	47.0	52.1	53.8	53.8	54.3	54.5	54.5		
= OR >300	29.8	50.0	57.0	59.1	59.4	59.8	60.0	60.0		
= OR >150	29.8	50.0	57.2	59.4	59.6	60.0	60.2	60.2		
= OR > 0	30.0	51.3	60.4	64.0	66.0	66.4	67.0	67.2		
TOTAL	141	241	284	301	310	312	315	316		

TOTAL NUMBER OF OBS: 470 PCT FREQ NH <5/8: 32.8

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

										TOTAL
										OBS
0	1	2	3	4	5	6	7	8	8	505
5.5	2.4	8.3	7.1	8.1	7.3	9.9	11.9	32.5	6.9	505

DECEMBER

PERIOD: (PRIMARY) 1942-1969  
(OVER-ALL) 1900-1969

AREA 0009 ADAK  
51-55N 172-130W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.0	.0	.0	.0	.4	.0	.0	.1	.0	.1	.1	.1	.1	.0	.1	.0	.0	.0	9	1.1
ND PCP	.0	.0	.0	.0	.1	.1	.0	.0	.3	.0	.0	.0	.1	.0	.0	.0	.0	.0	5	.6
TOTAL	0	0	0	0	4	1	0	1	2	1	1	1	2	0	1	0	0	0	14	1.8
1/2<1	.1	.1	.3	.0	.3	.3	.5	.4	.1	.0	.3	.0	.1	.0	.1	.1	.0	.0	21	2.6
ND PCP	.0	.0	.1	.0	.3	.1	.0	.0	.0	.0	.0	.1	.1	.0	.1	.1	.0	.0	8	1.0
TOTAL	1	1	3	0	4	3	4	3	1	0	2	1	2	0	2	2	0	0	29	3.6
1<2	.5	.4	.6	.6	.3	.4	1.1	.5	.5	.1	.4	.6	.0	.3	.1	.1	.0	.0	52	6.5
ND PCP	.1	.0	.1	.0	.4	.0	.0	.0	.1	.0	.1	.1	.0	.0	.0	.0	.0	.0	8	1.0
TOTAL	5	3	6	5	5	3	9	4	5	1	4	6	0	2	1	1	0	0	60	7.5
2<5	.5	.4	1.1	.5	1.6	.6	1.4	.1	.5	.3	.8	.6	.5	.4	.4	.1	.0	.0	78	9.8
ND PCP	.0	.0	.5	.3	.4	.4	.3	.1	.6	.4	.6	.6	1.0	.3	.5	.0	.0	.1	48	6.0
TOTAL	4	3	13	6	15	8	13	2	9	5	11	10	12	5	7	1	0	1	126	15.8
5<10	1.0	.5	1.5	.8	1.1	.6	1.3	.3	.5	.0	.3	1.0	.9	.5	.4	.8	.0	.0	90	11.3
ND PCP	1.3	.6	.6	.8	1.6	.9	1.4	2.3	1.4	2.0	1.9	2.1	3.6	2.0	1.0	.9	.0	.1	195	24.4
TOTAL	18	9	17	12	22	12	21	20	15	16	17	25	36	20	11	13	0	1	285	35.7
10+	.4	.1	.4	.0	.4	.0	.1	.0	.1	.0	.0	.4	.6	.0	.5	.3	.0	.0	26	3.3
ND PCP	2.1	2.1	1.9	1.5	2.6	.8	.9	.9	1.6	1.0	1.8	2.5	4.1	2.5	2.3	2.6	.0	1.1	258	32.3
TOTAL	20	18	18	12	24	6	8	7	14	8	14	23	38	20	22	23	0	9	284	35.6
TOTAL	48	34	57	35	75	33	55	37	46	31	48	66	90	47	44	40	0	11	798	100.0
PCT	6.0	4.3	7.1	4.4	9.4	4.1	6.9	4.6	5.8	3.9	6.1	8.3	11.3	5.9	5.5	5.0	.0	1.4	100.0	

DECEMBER

PERIOD: (PRIMARY) 1942-1969  
(OVER-ALL) 1900-1969

AREA 0009 ADAK  
51-55N 172-180W

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	1	.1
	11-21	.0	.0	.0	.1	.2	.0	.0	.0	.1	.0	.0	.1	.0	.0	.2	.0	.0	.0	7	.6
	22+	.0	.0	.1	.0	.2	.1	.0	.1	.0	.2	.1	.0	.2	.0	.0	.0	.0	.0	10	.8
	TOTAL	0	0	1	1	4	1	0	1	2	2	1	1	2	0	2	0	0	0	18	1.4
1/2<1	0-3	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	3	.2
	4-10	.0	.0	.2	.0	.1	.1	.1	.0	.0	.0	.2	.0	.0	.0	.1	.1	.0	.0	10	.8
	11-21	.1	.0	.2	.0	.2	.1	.1	.2	.0	.0	.2	.1	.1	.0	.0	.1	.0	.0	18	1.4
	22+	.0	.1	.2	.0	.2	.0	.2	.1	.2	.3	.0	.0	.2	.1	.1	.0	.0	.0	19	1.5
	TOTAL	1	1	7	0	6	4	5	3	2	4	6	2	3	1	3	2	0	0	50	4.0
1<2	0-3	.4	.1	.0	.0	.0	.0	.0	.0	.1	.2	.2	.0	.1	.0	.1	.0	.0	.1	14	1.1
	4-10	.4	.1	.3	.4	.1	.1	.1	.1	.2	.2	.2	.2	.1	.0	.1	.0	.0	.0	31	2.5
	11-21	.1	.2	.2	.0	.1	.2	.1	.2	.1	.0	.2	.1	.2	.1	.0	.1	.0	.0	23	1.8
	22+	.0	.3	.4	.3	.3	.2	.4	.2	.0	.2	.3	.2	.0	.0	.0	.0	.0	.0	38	3.0
	TOTAL	11	8	12	9	6	5	10	5	5	6	10	8	4	3	2	1	0	1	106	8.5
2<5	0-3	.3	.0	.2	.0	.2	.0	.2	.1	.0	.0	.1	.1	.2	.1	.1	.0	.0	.2	19	1.5
	4-10	.6	.2	.4	.3	.6	.0	.5	.1	.2	.2	.7	.2	.5	.2	.5	.2	.0	.0	67	5.4
	11-21	.2	.1	.6	.2	1.0	.2	.5	.2	.3	.1	.3	.1	.2	.1	.3	.0	.0	.0	54	4.3
	22+	.2	.3	.6	.2	.3	.6	.7	.2	.6	.3	.6	.5	.9	.2	.2	.1	.0	.0	82	6.6
	TOTAL	17	8	22	8	27	11	23	7	14	7	21	11	21	7	13	3	0	2	222	17.8
5<10	0-3	.1	.1	.1	.0	.0	.0	.1	.0	.2	.1	.1	.1	.3	.1	.0	.0	.0	.2	18	1.4
	4-10	.6	.2	.9	.6	.6	.1	.4	.2	.5	.2	.9	.9	1.0	.6	.4	.4	.0	.0	103	8.3
	11-21	1.0	.4	.6	.5	1.3	.9	1.2	.8	.7	.5	.6	.8	1.4	.9	.8	.6	.0	.0	162	13.0
	22+	.5	1.0	1.3	.3	.7	.2	1.0	1.0	.4	.8	.8	1.1	1.6	.6	.2	.5	.0	3	151	12.1
	TOTAL	26	22	36	17	32	14	34	24	23	19	30	36	54	28	18	18	0	3	434	34.8
10+	0-3	.1	.2	.1	.1	.2	.2	.2	.0	.1	.2	.2	.0	.1	.0	.0	.1	.0	1.1	32	2.6
	4-10	.4	.6	.7	.6	.6	.2	.6	.2	.7	.3	.6	.5	1.6	.5	.6	.9	.0	.0	121	9.7
	11-21	1.0	.6	1.0	.7	1.6	.5	.4	.4	.6	.2	.6	.9	1.3	.8	1.3	.9	.0	.0	159	12.7
	22+	.4	.4	.6	.4	.6	.2	.1	.1	.2	.2	1.0	1.1	1.5	.7	.5	.5	.0	.0	106	8.5
	TOTAL	24	21	29	23	38	13	16	9	21	11	29	31	56	25	29	29	0	14	418	33.5
	TOTAL	79	60	107	58	113	48	88	49	67	49	97	89	140	64	67	53	0	20	1248	100.0
	PCT	6.3	4.8	8.6	4.6	9.1	3.8	7.1	3.9	5.4	3.9	7.8	7.1	11.2	5.1	5.4	4.2	.0	1.6	100.0	

DECEMBER

PERIOD: (PRIMARY) 1942-1969  
(OVER-ALL) 1900-1969

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET,NH >4/8),AND  
OCCURRENCE OF NH <5/8 BY HOUR

hour (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	7.6	.0	9.3	17.8	28.0	10.2	2.5	.8	.0	.0	76.3	23.7	118
06009	8.0	.9	3.5	17.7	16.8	8.0	3.5	.9	.0	.0	59.3	40.7	113
12015	6.8	.0	4.5	11.4	30.3	9.1	4.5	.0	.0	.0	66.7	33.3	132
18021	7.0	.0	4.3	20.0	17.4	13.9	1.7	.0	.0	.0	64.3	35.7	115
TOT	35	1	26	79	112	49	15	2	0	0	319	159	478
PCT	7.3	.2	5.4	16.5	23.4	10.3	3.1	.4	.0	.0	66.7	33.3	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

hour (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.9	2.6	2.6	12.1	21.6	60.3	116
06009	2.7	1.8	5.4	11.6	30.4	48.2	112
12015	1.6	2.3	3.9	7.8	27.9	56.6	129
18021	1.8	.9	2.7	9.7	31.9	53.1	113
TOT	8	9	17	48	131	257	470
PCT	1.7	1.9	3.6	10.2	27.9	54.7	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET,NH >4/8),BY HOUR

hour (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND5+	NH <5/8 AND 5+	TOTAL OBS
00003	6.9	16.4	37.1	38.8	24.1	116
06009	7.1	13.4	38.4	24.1	37.5	112
12015	7.8	13.2	28.7	41.1	30.2	129
18021	7.1	12.4	38.1	28.3	33.6	113
TOT	34	65	166	157	147	470
PCT	7.2	13.8	35.3	33.4	31.3	100.0

DECEMBER

PERIOD: (PRIMARY) 1942-1969  
(OVER-ALL) 1900-1969

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TABLE 13

TEMP F	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP										TOTAL OBS	PCT FREQ
	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100				
50/54	.0	.0	.0	.0	.1	.0	.1	.0			2	.2
45/49	.0	.0	.1	.0	.5	1.2	1.2	1.0			37	3.9
40/44	.0	.0	.1	.2	2.6	6.3	7.0	10.9			254	27.1
35/39	.0	.0	.1	1.4	5.3	7.7	12.1	24.1			475	50.7
30/34	.0	.0	.0	.0	1.2	3.6	5.4	6.5			157	16.8
25/29	.0	.0	.0	.0	.0	.3	.1	.9			12	1.3
TOTAL	0	0	3	15	91	179	243	406			937	100.0
PCT	.0	.0	.3	1.6	9.7	19.1	25.9	43.3				

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP											VAR	CALM
N	NE	E	SE	S	SW	W	NW	VAR	VAR	CALM		
.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.1	.0	.1
.3	.3	.4	.3	.9	.6	.4	.3	.0	.0	.3	.0	.3
1.4	3.0	4.9	5.8	3.9	3.9	3.1	.5	.0	.0	.5	.0	.5
6.2	7.2	8.1	4.9	3.3	8.8	7.2	4.5	.0	.0	.6	.0	.6
4.2	3.6	.3	.6	.7	1.2	2.5	3.2	.0	.0	.4	.0	.4
.5	.3	.0	.0	.0	.1	.0	.3	.0	.0	.0	.0	.0
118	135	129	109	83	137	123	84	0	0	19	0	19
12.6	14.4	13.8	11.6	8.9	14.6	13.1	9.0	.0	.0	2.0	.0	2.0

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR										TOTAL OBS
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN		
00003	50	48	44	38	32	29	28	38.2		365
06009	50	48	44	38	31	30	27	37.7		349
12015	47	45	43	37	32	27	25	37.2		206
18021	47	45	44	37	31	28	28	37.3		335
TOT	50	47	44	37	32	29	25	37.7		1255

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR										TOTAL OBS
HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	MEAN		
00003	.0	2.9	9.0	18.3	27.2	42.7	84	84		279
06009	.0	.7	9.5	19.0	26.0	44.7	85	85		273
12015	.0	1.6	10.2	22.8	29.9	35.4	83	83		127
18021	.0	2.3	10.3	18.3	22.1	46.9	85	85		262
TOT	0	18	91	180	243	409	85	85		941

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AREA 0009 ADAK  
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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	25	29	33	37	41	45	49	TOT	W	WD
	28	32	36	40	44	48	52		FOG	FOG
9/10	.0	.0	.0	.0	.0	.0	.2	1	.0	.2
7/8	.0	.0	.0	.0	.0	.5	.0	3	.0	.5
6	.0	.0	.0	.2	.0	.0	.0	1	.0	.2
5	.0	.0	.0	.2	.2	.3	.0	4	.0	.6
4	.0	.0	.2	.3	.9	.5	.0	12	.0	1.8
3	.0	.0	.2	.2	2.0	.8	.0	20	.2	2.9
2	.0	.0	.2	.9	3.0	.2	.0	28	.3	4.0
1	.0	.0	.3	2.0	2.3	.0	.0	30	.3	4.3
0	.0	.0	.9	4.6	3.0	.2	.0	57	.3	8.4
-1	.0	.2	.3	6.9	1.5	.0	.0	58	.5	8.4
-2	.0	.0	2.1	8.7	1.1	.2	.0	79	.2	11.9
-3	.0	.0	1.7	6.3	1.2	.0	.0	60	.5	8.7
-4	.0	1.2	6.7	7.0	.6	.0	.0	102	.0	15.5
-5	.0	.5	4.6	2.6	.3	.0	.0	52	.0	7.9
-6	.0	.5	3.8	2.3	.0	.0	.0	43	.0	6.6
-7/-8	.0	1.4	5.9	3.4	.0	.0	.0	70	.0	10.7
-9/-10	.2	1.5	1.7	.2	.0	.0	.0	23	.0	3.5
-11/-13	.3	1.2	.2	.0	.0	.0	.0	11	.0	1.7
-14/-16	.2	.2	.0	.0	.0	.0	.0	2	.0	.3
TOTAL	4	43	188	298	106	16	1	656	14	642
PCT	.6	6.6	28.7	45.4	16.2	2.4	.2	100.0	2.1	97.9



PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.0	.0	.0	.0	.0	.0	0	.0	.7	.0	.0	.0	.0	1
1-2	.0	1.3	.7	.0	.0	.0	3	.0	.7	1.3	.0	.0	.0	3
3-4	.0	.0	1.3	.0	.0	.0	2	.0	2.0	2.0	.7	.0	.0	7
5-6	.0	.0	1.3	.7	.0	.0	3	.0	.7	3.9	.0	.0	.0	7
7	.0	.0	2.0	.0	.0	.0	3	.7	.0	.7	.0	.0	.0	2
8-9	.0	.0	.0	.7	.0	.0	1	.0	.0	.7	.0	.0	.0	1
10-11	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
13-16	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.7	.0	1
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	0	2	8	2	0	0	12	1	6	13	1	1	0	22
PCT	.0	1.3	5.3	1.3	.0	.0	7.9	.7	3.9	8.6	.7	.7	.0	14.5

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
1-2	.0	.7	2.0	.0	.0	.0	4	.0	1.3	.7	.0	.0	.0	3
3-4	.0	.7	.0	.7	.0	.0	2	.0	1.3	2.0	.0	.0	.0	5
5-6	.0	.0	.0	.0	.0	.0	0	.0	.0	.7	.7	.0	.0	2
7	.0	.7	2.6	2.0	.7	.0	9	.0	.0	.0	1.3	.0	.0	0
8-9	.0	.0	.0	.0	.0	.0	3	.0	.0	.7	.7	.0	.0	2
10-11	.0	.0	.0	.0	.0	.0	1	.0	.0	.7	.7	.0	.0	2
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	1
13-16	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	1.3	.0	2
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.7	.7	.7	.0	2
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	1
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	0	3	7	7	2	0	19	0	4	7	6	3	0	20
PCT	.0	2.0	4.6	4.6	1.3	.0	12.5	.0	2.6	4.6	3.9	2.0	.0	13.2

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S										SW										TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.0	.0	.0	.0	.0	.0	1.3	.0	.0	.0	.0	.0
1-2	.0	3.3	.0	.0	.0	.0	5	.0	.7	.0	.0	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0
3-4	.0	.7	2.0	.7	.0	.0	5	.0	1.3	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	2.0	2.0	.0	.0	.0	6	.0	.0	2.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.7	1.3	.0	3	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.7	.0	.0	1	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.7	.7	.0	2	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.7	.0	.0	1	.0	.0	.0	.0	1.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOTAL	.0	5.9	3.9	3.3	2.0	.0	23	.0	3.3	2.6	2.0	1.3	.0	15	.0	5	4	3	2	.0	15
PCT	.0	.0	.0	.0	.0	.0	15.1	.0	.0	.0	.0	.0	.0	9.9	.0	.0	.0	.0	.0	.0	.0

HGT	W										NW										TOTAL	GRAND TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	GRAND TOTAL
<1	.0	.0	.0	.0	.0	.0	0	.0	.7	.0	.0	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0	4
1-2	.0	.0	.7	.0	.0	.0	1	.0	.7	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	22
3-4	.0	2.0	1.3	1.3	.0	.0	7	.0	2.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	34
5-6	.0	.7	2.0	.7	.0	.0	5	.0	.0	1.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	28
7	.0	.0	.0	.7	.7	.7	3	.0	.0	2.0	2.0	.0	.0	6	.0	.0	.0	.0	.0	.0	.0	27
8-9	.0	.0	1.3	1.3	.7	.7	5	.0	.0	.0	.7	.0	.0	1	.0	.0	.0	.0	.0	.0	.0	15
10-11	.0	.0	.0	.7	.0	.7	2	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	5
12	.0	.0	.0	.0	.7	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	4
13-16	.0	.0	.0	.0	.0	.0	1	.0	.0	.0	.0	.7	.0	1	.0	.0	.0	.0	.0	.0	.0	7
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	4
20-22	.0	.0	.0	.7	.0	.0	1	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	2
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	.0	2.6	5.3	5.3	2.0	1.3	25	.0	3.3	3.9	2.5	1.7	.0	16	.0	5	6	4	1	.0	16	152
PCT	.0	.0	.0	.0	.0	.0	16.4	.0	.0	.0	.0	.0	.0	10.5	.0	.0	.0	.0	.0	.0	.0	100.0

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1969

DECEMBER

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TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	.7	2.6	.0	.0	.0	.0					5
1-2	.0	8.5	5.9	.0	.0	.0					22
3-4	.0	9.8	9.2	3.3	.0	.0					34
5-6	.0	3.3	13.1	2.0	.0	.0					28
7	.7	.7	7.2	5.9	2.6	.7					27
8-9	.0	.0	2.0	7.2	.7	.0					15
10-11	.0	.0	.7	1.3	.7	.7					5
12	.0	.0	.0	2.0	.7	.0					4
13-16	.0	.0	.0	.7	3.9	.0					7
17-19	.0	.0	.7	.0	1.3	.7					4
20-22	.0	.0	.0	1.3	.0	.0					2
23-25	.0	.0	.0	.0	.0	.0					0
26-32	.0	.0	.0	.0	.0	.0					0
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	2	38	59	36	15	3					153
PCT	1.3	24.8	38.6	23.5	9.8	2.0					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.6	5.2	6.4	4.0	1.2	1.2	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	33
6-7	.0	1.2	5.2	9.2	6.9	3.5	1.7	.6	.6	.6	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	52
8-9	.0	.0	.6	2.9	6.9	2.9	2.3	.6	1.2	1.7	1.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	36
10-11	.0	.0	.0	1.7	1.2	.6	2.3	1.7	1.7	.6	1.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	20
12-13	.0	.0	.0	.6	.0	.6	.6	.6	1.7	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	8
>13	.0	.0	.0	.0	1.7	.0	.0	.0	1.2	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	6
INDET	6.9	1.7	.0	.0	.0	.0	1.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	18
TOTAL	13	14	21	32	31	15	17	6	11	6	7	0	0	0	0	0	0	0	0	0	173
PCT	7.5	8.1	12.1	18.5	17.9	8.7	9.8	3.5	6.4	3.5	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0

PERIOD: (PRIMARY) 1934-1970  
(OVER-ALL) 1899-1970

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TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
				FRZG PCPN	SNOW	OTHER FRZN PCPN					FOG WFO	SMOKE HAZE	DUST BLWG	NO SIG WEA	
N	.4	.1	.3	*	.5	*	.1	1.2	209	*	.6	.1	.0	4.3	1045
NNE	.3	.1	.2	.0	.4	.0	*	.8	143	.0	.4	*	.0	2.1	570
NE	.5	.1	.5	.0	.4	.0	*	1.4	234	.0	.5	.2	.0	2.8	822
ENE	.5	*	.4	.0	.3	.0	*	1.1	187	.0	.4	*	*	2.2	630
E	.8	*	.6	.0	.5	.0	*	1.9	323	.0	.7	.1	*	3.6	1084
ESE	.6	*	.4	.0	.2	.0	*	1.2	205	.0	.6	.1	.0	2.2	676
SE	1.2	.1	.7	.0	.3	*	*	2.2	367	.0	.9	.1	*	3.0	1037
SSE	.9	*	.6	.0	.1	.0	.C	1.5	251	.0	.8	.1	.0	2.4	815
S	1.2	.1	.9	.0	.1	*	*	2.2	366	*	1.7	.1	.0	4.2	1384
SSW	.7	.1	.6	.0	.1	*	*	1.4	237	*	1.1	.1	.0	2.9	924
SW	.9	.1	.7	.0	.2	.0	*	1.9	328	*	1.6	.2	.0	4.5	1388
WSW	.5	.2	.5	.0	.4	.0	*	1.6	264	*	1.2	.1	*	5.3	1384
W	.5	.2	.6	.0	.5	*	.1	1.8	303	*	1.3	.1	.0	9.0	2066
WNW	.3	.1	.2	.0	.3	.0	*	.7	125	*	.3	*	.0	4.1	883
NW	.3	.1	.2	.0	.4	.0	*	1.1	179	*	.6	.1	*	4.6	1071
NNW	.1	*	.2	.0	.3	.0	*	.7	118	*	.4	.1	*	3.3	753
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
CALM	.1	*	.1	.0	*	.0	.0	.2	41	.0	.5	.1	.0	1.3	345
TOT OBS	1620	227	1301	3	846	5	64		3880	12	2290	257	10	10428	16877
TOT PCT	9.6	1.3	7.7	*	5.0	*	.4	23.0		.1	13.6	1.5	.1	61.8	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THOR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG	PCPN	SNOW					OTHER FRZN PCPN	FOG	SMOKE HAZE	DUST	SIG	
0603	9.4	1.8	6.7	*	6.0	*	.4	23.0	1078	*	14.4	2.0	*	60.5	4680	
0609	9.8	.9	7.9	.0	5.1	.0	.3	23.2	976	.1	14.4	1.8	*	60.5	4214	
1205	7.9	1.5	6.8	*	3.5	.1	.6	19.1	761	.1	10.2	.7	.1	69.9	3993	
1801	11.1	1.2	9.5	.0	5.2	*	.3	26.3	1095	*	15.2	1.5	.1	57.0	4170	
TOT	1631	231	1312	3	853	5	64	22.9	3910	12	2318	259	10	10548	17057	
PCT	9.6	1.4	7.7	*	5.0	*	.4			.1	13.6	1.5	.1	61.8	100.0	

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PERIOD: (PRIMARY) 1934-1970  
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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)					18	21
	0-3	4-10	11-21	22-33	34-47	00	03	06	09	12					15						
N	.4	2.2	2.3	.9	.2	*	1456	6.1	14.5	5.8	4.1	6.6	6.1	6.6	5.3	6.6	6.2				
NNE	.2	1.3	1.4	.6	.2	*	862	3.6	14.9	4.0	3.8	3.9	3.8	3.0	2.8	3.8	3.0				
NE	.5	2.1	2.0	.8	.2	*	1338	5.6	13.8	5.9	4.2	4.7	8.4	4.6	4.7	4.2	7.3				
ENE	.2	1.2	1.3	.6	.2	*	855	3.6	15.0	3.7	3.5	3.8	3.5	3.4	4.1	3.5	3.3				
E	.4	2.1	2.2	1.1	.3	*	1482	6.2	15.5	6.8	5.7	6.2	6.4	6.0	5.2	5.8	6.2				
ESE	.2	.9	1.6	.7	.2	*	855	3.6	15.2	3.9	4.5	3.7	3.3	3.1	5.3	3.4	3.4				
SE	.4	1.8	2.4	1.0	.3	.1	1431	6.0	15.8	5.6	6.9	5.6	6.5	5.6	6.0	5.7	7.2				
SSE	.2	1.2	1.8	.8	.3	*	1041	4.4	16.9	4.0	4.3	4.4	3.9	5.0	5.5	5.0	3.8				
S	.4	2.3	3.2	1.4	.3	.1	1803	7.0	15.7	7.4	8.0	8.5	7.2	7.2	9.0	8.0	6.7				
SSW	.2	1.5	2.3	1.1	.2	*	1269	5.3	16.4	5.3	4.6	5.5	4.9	5.5	6.3	6.0	4.5				
SW	.5	3.0	3.7	1.4	.3	*	2166	9.1	14.9	8.9	12.0	7.8	9.1	8.7	8.7	8.4	11.2				
WSW	.4	2.2	3.4	1.6	.4	.1	1924	8.1	16.8	8.2	9.0	7.6	8.0	8.9	9.0	7.5	7.5				
W	.6	3.7	4.7	2.1	.5	.1	2785	11.7	15.8	11.9	10.6	12.1	10.2	12.5	10.9	13.3	10.2				
WNW	.2	1.5	2.1	1.0	.2	.1	1216	5.1	16.5	4.6	5.2	5.9	4.8	6.3	5.8	5.2	3.8				
NW	.5	2.4	2.7	1.2	.3	*	1698	7.1	14.9	7.3	8.2	7.1	7.3	6.3	5.3	6.9	8.1				
NNW	.2	1.5	1.8	.8	.2	*	1066	4.5	15.1	4.4	4.7	4.6	3.9	4.7	5.3	5.0	3.7				
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0				
CALM	2.4	7383	9294	4074	1027	161	572	2.4	.0	2.3	.8	2.2	2.8	2.6	.9	2.0	4.0				
TOT OBS	1885	7383	9294	4074	1027	161	23824	100.0	15.2	5712	1152	3412	2837	3533	1043	3216	2919				
TOT PCT	7.9	31.0	39.0	17.1	4.3	.7				100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0				

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)					
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD	00	03	06	09	12	15	18	21
N	2.0	4.3	2.5	.8	.2	2318	9.7	14.7	9.9	7.9	10.5	9.8	9.6	8.1	10.4	9.2
NE	2.2	3.9	2.1	.8	.1	2193	9.2	14.3	9.6	7.6	8.4	11.8	8.0	8.8	7.7	10.6
E	1.8	4.1	2.7	1.0	.2	2337	9.8	15.7	10.7	10.2	9.8	9.7	9.1	10.5	8.8	9.6
SE	1.9	4.3	2.8	1.1	.3	2472	10.4	16.3	9.6	11.2	10.0	10.4	10.5	11.5	10.7	11.0
S	2.1	5.5	3.8	1.3	.2	3077	12.9	16.0	12.6	12.6	14.0	12.1	12.7	15.3	14.0	11.2
SW	3.0	7.3	4.9	1.7	.3	4090	17.2	15.8	17.0	21.0	15.4	17.1	17.6	17.7	15.9	18.7
W	2.8	7.2	4.7	1.7	.3	4001	16.8	16.0	16.5	15.8	18.0	15.0	18.7	16.7	18.5	14.0
NW	2.3	5.1	2.8	1.2	.1	2764	11.6	15.0	11.7	12.8	11.7	11.3	11.0	10.5	12.0	11.8
VAR	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	2.4	9957	6287	2317	405	572	2.4	.0	2.3	.8	2.2	2.8	2.6	.9	2.0	4.0
TOT OBS	4858	9957	6287	2317	405	23824	100.0	15.2	5712	1152	3412	2837	3533	1043	3216	2919
TOT PCT	20.4	41.8	26.4	9.7	1.7				100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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PERIOD: (PRIMARY) 1934-1970  
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TABLE 4

HOUR	PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)									
	WIND SPEED (KNOTS)					PCT TOTAL				
	1-3	4-10	11-21	22-33	34-47	48+	CALM	MEAN	FREQ	OBS
0000	5.8	30.9	38.4	17.3	4.7	.9	2.0	15.4	100.0	6864
0600	5.9	31.9	38.2	16.6	4.3	.6	2.4	15.0	100.0	6249
1200	3.8	27.3	42.1	19.0	4.9	.6	2.2	16.2	100.0	4576
1800	6.0	32.9	38.2	15.9	3.5	.5	2.9	14.4	100.0	6135
TOT	1313	7583	9294	4074	1027	161	572	15.2		23824
PCT	5.5	31.0	39.0	17.1	4.3	.7	2.4		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 &	TOTAL	MEAN
					OBS	CLOUD COVER
N	.3	.3	2.1	3.5	762	6.9
NNE	.2	.2	.9	2.2	430	6.9
NE	.3	.2	.9	3.1	547	7.0
ENE	.2	.1	.6	2.7	438	7.3
E	.2	.2	1.0	5.0	785	7.4
ESE	.2	.1	.6	2.9	459	7.3
SE	.1	.2	1.2	4.2	692	7.4
SSE	.1	.1	.7	3.8	581	7.4
S	.2	.3	1.5	6.5	1048	7.4
SSW	.2	.3	1.1	4.0	697	7.2
SW	.4	.5	1.8	5.1	956	7.0
WSW	.6	.7	1.9	4.6	965	6.7
W	.9	1.6	3.6	6.7	1570	6.5
WNW	.5	.7	1.9	2.8	714	6.4
NW	.4	.6	2.3	3.2	797	6.6
NNW	.3	.4	1.8	2.3	588	6.6
VAR	.0	.0	.0	.0	0	.0
CALM	.2	.1	.4	1.3	247	6.7
TOT OBS	659	805	2970	7842	12276	7.0
TOT PCT	5.4	6.6	24.2	63.9	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH &gt;4/8)

AND OCCURRENCE OF NH &lt;5/8 BY WIND DIRECTION

WIND DIR	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8	TOTAL
	149	299	599	999	1999	3499	4999	6499	7999	ANY HGT	OBS	OBS
N	.5	.1	.3	.8	1.9	1.1	.2	*	*	*	1.1	762
NNE	.3	*	.1	.6	1.1	.6	.1	*	*	*	.6	430
NE	.5	*	.2	.7	1.3	.7	.1	.0	*	*	.8	547
ENE	.4	*	.2	.5	1.1	.7	.1	*	*	*	.5	438
E	1.1	*	.3	.9	1.9	.9	.3	.1	*	*	.8	785
ESE	.6	.1	.3	.4	1.1	.6	.1	*	*	.0	.5	459
SE	1.0	.1	.4	.8	1.6	.7	.2	*	*	*	.6	692
SSE	1.0	.1	.3	.7	1.3	.6	.1	*	*	.0	.5	581
S	2.0	.1	.6	1.4	2.1	.9	.2	*	*	.1	1.1	1048
SSW	1.1	.1	.3	1.0	1.5	.7	.1	*	*	*	.8	697
SW	1.3	.1	.4	1.4	1.8	.9	.2	*	*	.1	1.5	956
WSW	1.0	.1	.3	1.2	1.9	.9	.3	.1	*	.1	2.0	965
W	1.1	.1	.5	2.0	3.3	1.9	.3	.1	*	*	3.4	1570
WNW	.3	*	.3	.9	1.8	.7	.2	*	*	*	1.5	714
NW	.4	*	.1	.8	2.1	1.1	.2	*	*	*	1.5	797
NNW	.2	*	.2	.6	1.5	.8	.2	*	*	*	1.1	588
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.4	*	*	.3	.5	.3	.1	*	*	*	.4	247
TOT OBS	1639	155	597	1857	3401	1746	395	71	54	54	2307	12276
TOT PCT	13.4	1.3	4.9	15.1	27.7	14.2	3.2	.6	.4	.4	18.8	100.0

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	.4	.8	.9	.9	.9	.9	.9	.9
= OR >5000	.7	1.4	1.5	1.5	1.5	1.5	1.5	1.5
= OR >3500	2.6	4.3	4.6	4.7	4.7	4.7	4.8	4.8
= OR >2000	9.9	16.6	18.2	18.7	18.8	18.9	19.0	19.0
= OR >1000	23.0	39.5	44.3	45.9	46.3	46.5	46.7	46.7
= OR >600	28.4	50.5	58.0	60.5	61.3	61.6	61.8	61.8
= OR >300	29.4	53.3	61.7	64.8	65.8	66.4	66.6	66.7
= OR >150	29.6	53.8	62.5	65.9	66.9	67.6	67.9	67.9
= OR > 0	30.0	55.8	66.3	71.2	74.3	77.7	80.9	81.2
= OR TOTAL	3688	6859	8147	8751	9132	9548	9945	9982

TOTAL NUMBER OF OBS: 12296

PCT FREQ NH <5/8: 18.8

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	TOTAL							
	0	1	2	3	4	5	6	7
2.2	2.5	4.8	4.6	4.6	4.5	5.2	9.3	11.4
							44.8	10.5
							14077	

## ANNUAL

PERIOD: (PRIMARY) 1934-1970  
(OVER-ALL) 1899-1970AREA 0009 ADAK  
51-55N 172-180W

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.1	*	.1	.1	.1	.1	.2	.1	.1	.1	.1	*	*	*	.0	*	216	1.3
NO PCP	.2	.2	.1	.3	.4	.4	.9	.6	.6	.4	.5	.2	.3	.2	.0	.3	1008	6.0
TOTAL	40	38	45	72	79	93	172	111	129	85	94	33	57	31	0	56	1224	7.3
PCP	.1	.1	.1	.1	.2	.2	.2	.2	.2	.2	.1	.1	.1	.1	.0	*	349	2.1
NO PCP	.1	*	.1	.1	.1	.2	.4	.2	.3	.3	.2	.1	.1	.1	.0	*	437	2.6
TOTAL	31	18	37	64	57	54	89	58	78	72	59	21	30	31	0	10	786	4.7
PCP	.1	.1	.2	.2	.4	.2	.4	.2	.3	.2	.2	.1	.1	.1	.0	*	585	3.5
NO PCP	.2	.1	.2	.1	.2	.1	.4	.3	.4	.4	.5	.2	.2	.1	.0	.1	630	3.8
TOTAL	55	34	62	91	108	65	123	88	130	101	115	44	35	21	0	19	1215	7.2
PCP	.3	.2	.4	.4	.7	.4	.6	.3	.5	.4	.4	.2	.2	.1	.0	.1	1023	6.1
NO PCP	.4	.2	.3	.3	.4	.4	.7	.5	.7	.6	1.0	.3	.4	.2	.0	.1	1263	7.5
TOTAL	114	74	124	196	187	134	212	135	209	169	239	75	101	64	0	32	2286	13.6
PCP	.5	.3	.5	.5	.6	.5	.7	.5	.6	.6	.7	.3	.5	.3	.0	.1	1311	7.8
NO PCP	1.5	.8	1.0	1.3	1.3	1.2	1.8	1.3	2.0	2.4	3.6	1.5	1.6	1.2	.0	.4	4104	24.4
TOTAL	337	188	258	303	313	272	425	299	441	491	715	310	350	242	0	93	5415	32.2
PCP	.1	.1	.1	.1	.2	.1	.2	.1	.2	.2	.3	.1	.4	.1	.0	*	389	2.3
NO PCP	2.6	1.2	1.6	1.2	1.5	1.1	2.0	1.2	2.2	2.5	4.7	2.3	2.8	2.0	.0	.8	5478	32.6
TOTAL	459	213	285	348	286	195	357	226	393	457	837	402	502	362	0	133	5857	34.9
TOTAL	1036	565	811	1074	1030	813	1378	917	1380	1375	2059	885	1075	751	0	343	16793	100.0
PCT	6.2	3.4	4.8	6.4	6.1	4.8	8.2	5.5	8.2	8.2	12.3	5.3	6.4	4.5	.0	2.0	100.0	



ANNUAL

PERIOD: (PRIMARY) 1934-1970  
(OVER-ALL) 1899-1970

AREA 0009 ANAK  
51-55N 1.2-180W

TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	.0	.3	171	.7
	4-10	.1	.1	.1	.1	.1	.1	.1	.1	.3	.2	.2	.1	.2	.1	.1	.1	.0		479	2.0
	11-21	.1	.1	.1	.1	.1	.1	.1	.1	.4	.2	.2	.2	.2	.1	.1	.1	.0		513	2.2
	22+	*	*	*	*	.1	*	.1	.1	.1	.1	.1	*	*	*	*	*	.0		184	.8
	TOTAL	49	41	47	36	77	57	84	94	192	125	134	95	107	38	64	43	0	64	1347	5.8
1/2<1	0-3	*	.0	*	*	*	*	*	.0	*	*	*	*	*	*	*	*	.0	.1	58	.2
	4-10	*	*	.1	.1	.1	*	.1	.1	.1	.1	.1	.1	.1	*	.1	*	.0		246	1.1
	11-21	.1	*	.1	.1	.1	.1	.1	.1	.2	.1	.2	.1	.1	.1	*	*	.0		342	1.5
	22+	*	*	*	*	.1	.1	.1	.1	.1	.1	.1	.1	.1	*	*	.1	.0		264	1.1
	TOTAL	36	22	50	42	81	44	60	56	98	70	91	83	69	25	37	34	0	12	910	3.9
1<2	0-3	*	*	*	*	*	*	*	*	*	*	.1	*	*	*	*	.0	.0	.2	132	.6
	4-10	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.2	.2	.2	.1	.1	*	.0		450	1.9
	11-21	.1	.1	.1	.1	.1	.1	.2	.1	.2	.2	.3	.2	.3	.1	.1	.1	.0		550	2.3
	22+	.1	*	.1	.1	.2	.1	.2	.1	.2	.1	.2	.1	.1	.1	.1	*	.0		438	1.9
	TOTAL	77	56	91	76	105	76	136	81	138	105	167	122	152	59	53	32	0	44	1570	6.7
2<5	0-3	.1	*	.1	*	.1	*	*	*	.1	*	.1	*	.1	*	*	*	.0	.3	256	1.1
	4-10	.2	.2	.3	.2	.3	.1	.3	.1	.2	.2	.4	.3	.4	.1	.2	.1	.0		868	3.7
	11-21	.2	.1	.3	.2	.3	.3	.4	.3	.5	.3	.4	.4	.4	.1	.2	.1	.0		1046	4.5
	22+	.2	.1	.2	.2	.3	.2	.3	.3	.4	.3	.3	.3	.4	.2	.2	.1	.0		962	4.1
	TOTAL	164	112	194	136	248	154	242	160	258	173	290	235	320	115	163	94	0	74	3132	13.4
5<10	0-3	.1	.1	.1	.1	.1	*	.1	*	.1	*	.1	.1	.2	*	.2	.1	.0	.7	531	2.3
	4-10	.6	.4	.7	.4	.6	.3	.5	.4	.7	.5	1.1	.7	1.2	.5	.7	.4	.0		2201	9.4
	11-21	.9	.5	.7	.4	.7	.5	.8	.7	1.1	.7	1.3	1.3	1.6	.7	.9	.6	.0		3118	13.3
	22+	.5	.3	.4	.3	.4	.3	.5	.4	.6	.5	.6	.9	1.1	.5	.6	.4	.0		1938	8.3
	TOTAL	485	285	430	268	435	243	433	357	573	412	752	691	952	398	567	345	0	162	7788	33.3
10+	0-3	.2	.1	.2	.1	.1	.1	.2	.1	.1	.1	.2	.1	.2	.1	.2	.1	.0	.9	684	2.9
	4-10	1.1	.6	.8	.5	.9	.4	.7	.4	.9	.5	1.1	.8	1.6	.7	1.2	.8	.0		3026	12.9
	11-21	1.0	.6	.8	.5	.9	.6	.8	.5	.9	.7	1.2	1.2	2.1	1.1	1.4	.9	.0		3560	15.2
	22+	.4	.2	.3	.2	.3	.1	.2	.2	.3	.2	.5	.7	1.0	.5	.5	.3	.0		1391	5.9
	TOTAL	620	331	497	278	519	262	446	274	522	344	684	661	1152	572	790	499	0	210	8661	37.0
	TOTAL	1431	847	1309	836	1465	836	1401	1022	1781	1229	2118	1887	2752	1207	1674	1047	0	566	23408	100.0
	PCT	6.1	3.6	5.6	3.6	6.3	3.6	6.0	4.4	7.6	5.3	9.0	8.1	11.8	5.2	7.2	4.5	.0	2.4	100.0	

ANNUAL

PERIOD: (PRIMARY) 1934-1970  
(OVER-ALL) 1899-1970

AREA 0009 ADAK  
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH > 4/8), AND  
OCCURRENCE OF NH < 5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH < 5/8 ANY HGT	TOTAL OBS
00003	12.1	1.2	4.6	13.8	26.5	14.3	3.4	.8	.7	.4	77.9	22.1	3404
06009	12.0	1.4	4.6	15.3	27.7	13.5	3.5	.3	.3	.3	78.9	21.1	3182
12015	15.2	.9	4.4	13.6	27.2	13.7	2.6	.7	.3	.5	79.1	20.9	3059
18021	13.1	1.4	5.2	16.3	26.5	14.2	3.1	.5	.5	.5	81.2	18.8	3034
TOT	1656	155	599	1867	3419	1764	401	72	56	56	10045	2634	12679
PCT	13.1	1.2	4.7	14.7	27.0	13.9	3.2	.6	.4	.4	79.2	20.8	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	< 1/2	1/2 < 1	1 < 2	2 < 5	5 < 10	10+	TOTAL OBS
00003	7.1	3.3	4.7	9.8	27.0	48.1	3262
06009	6.6	2.9	4.9	11.1	30.6	43.9	3083
12015	7.0	3.2	5.3	12.6	31.7	40.1	2999
18021	7.4	3.4	5.5	11.1	30.6	42.0	2952
TOT	866	390	624	1371	3680	5365	12296
PCT	7.0	3.2	5.1	11.1	29.9	43.6	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET, NH > 4/8), BY HOUR

HOUR (GMT)	< 150 < 50YD	< 600 < 1	< 1000 < 5	1000+ AND 5+	NH < 5/8 AND 5+	TOTAL OBS
00003	12.4	19.9	40.3	41.3	18.4	3262
06009	12.5	19.9	42.1	39.5	18.4	3083
12015	15.3	22.2	43.9	37.7	18.4	2999
18021	13.4	21.7	44.9	39.3	15.9	2952
TOT	1647	2568	5254	4856	2186	12296
PCT	13.4	20.9	42.7	39.5	17.8	100.0

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TABLE 13

## PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
65/69	.0	.0	.0	.0	.0	.1	.1	.1	14	.1
60/64	.0	.0	.0	.1	.1	.1	.1	.1	57	.3
55/59	.0	.0	.0	.1	.1	.5	1.0	.8	426	2.6
50/54	.0	.0	.0	.1	.5	1.2	5.1	6.9	2266	13.8
45/49	.0	.0	.0	.1	.6	3.2	8.5	16.1	4688	28.5
40/44	.0	.0	.0	.2	1.4	3.6	6.8	13.8	4238	25.8
35/39	.0	.0	.0	.4	1.7	3.1	5.8	10.6	3553	21.6
30/34	.0	.0	.0	.1	.3	.9	2.2	2.7	1006	6.1
25/29	.0	.0	.0	.0	.0	.1	.2	.6	165	1.0
20/24	.0	.0	.0	.0	.0	.0	.0	.1	20	.1
TOTAL	0	2	22	138	792	2093	4910	8476	16433	100.0
PCT	.0	.0	.1	.8	4.8	12.7	29.9	51.6		

TABLE 14

## PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
65/69	.0	*	.0	.0	*	*	*	*	.0	*
60/64	*	*	*	*	*	.1	.1	*	.0	*
55/59	.2	.1	.1	.2	.5	.5	.6	.1	.0	.2
50/54	.8	.8	.9	1.4	2.6	3.4	2.2	1.1	.0	.6
45/49	2.5	2.4	2.4	2.9	3.9	5.4	5.3	2.9	.0	.9
40/44	2.3	2.5	2.8	2.9	3.3	4.3	4.0	3.1	.0	.6
35/39	2.4	2.3	2.5	2.3	2.1	3.3	3.5	2.9	.0	.3
30/34	1.2	1.0	.5	.3	.3	.6	1.0	1.1	.0	.1
25/29	.4	.2	*	*	*	*	.1	.2	.0	*
20/24	*	*	.0	.0	.0	.0	*	.1	.0	*
TOTAL	1611	1514	1529	1671	2092	2902	2767	1900	0	447
PCT	9.8	9.2	9.3	10.2	12.7	17.7	16.8	11.6	.0	2.7

TABLE 15

## MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HR	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
0003	66	58	54	45	34	29	19	44.2	6848
0609	67	57	53	43	33	28	18	43.4	6260
1215	63	54	51	43	32	27	19	42.1	4605
1821	66	55	52	43	32	27	19	42.6	6148
TOT	67	57	53	43	33	28	18	43.2	23861

TABLE 16

## PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HR	0-29	30-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
0003	.0	1.5	6.5	14.7	32.0	45.2	86	4787
0609	.0	.9	4.4	12.7	30.0	52.0	88	4595
1215	.0	.8	4.5	12.4	28.7	53.6	88	2596
1821	.0	.6	3.6	10.8	28.2	56.9	89	4541
TOT	0	162	796	2097	4938	8526	88	16519

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PERIOD: (PRIMARY) 1934-1970  
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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	17	20	21	24	25	28	29	32	33	36	37	40	41	44	45	48	49	52	53	56	57	60	61	64	65	68	TOT	W	W0
17/19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14/16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11/13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9/10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7/8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
-1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
-5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
-7/-8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
-9/-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
-11/-13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
-14/-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
-17/-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
-20/-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOTAL	3	28	121	408	1490	2842	3161	3666	1738	438	83	.6	.1	*	1	13987	1878	12109	86.6										
PCT	.2	.9	2.9	10.7	20.3	22.6	26.2	12.4	3.1	.6	.1	*																	

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N										NE										TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.2	.6	.0	.0	.0	.0	28	*	.4	.0	.0	.0	.0	17	*	.4	.0	.0	.0	.0	17
1-2	.1	1.4	1.1	.0	.0	.0	103	.1	.8	.6	.0	.0	.0	61	.1	.6	1.1	.1	.0	.0	61
3-4	*	.9	1.4	.1	.0	.0	95	*	.6	1.1	.1	.0	.0	74	.0	.8	1.1	.3	*	.0	74
5-6	.0	.3	1.2	.5	.0	.0	75	.0	.1	.8	.3	.0	.0	49	.0	.1	.7	.4	*	.0	49
7	.0	.1	.7	.4	.2	.0	52	*	.1	.7	.4	.0	.0	51	.0	.1	.2	.2	.1	.0	51
8-9	.0	*	.3	.4	*	.0	31	.0	.0	.2	.2	.1	.0	21	.0	.0	.1	.1	.1	.0	21
10-11	.0	.0	.2	.2	.0	.0	15	.0	.0	.1	.1	.1	.0	11	.0	.0	.2	.2	.1	.0	11
12	.0	.0	.1	.1	.1	.0	8	.0	.0	.0	.2	.1	.0	10	.0	.0	.0	.1	.1	.0	10
13-16	.0	.0	.0	.2	.1	*	11	.0	.0	.0	.1	.0	.0	6	.0	.0	.0	.1	*	.0	6
17-19	.0	.0	.0	*	.1	.0	4	.0	.0	.0	.0	.0	.0	4	.0	.0	.0	.0	.1	.0	4
20-22	.0	.0	.0	.0	.2	.0	7	.0	.0	.0	.0	.1	.0	5	.0	.0	.0	.0	.1	.0	5
23-25	.0	.0	.0	.0	.1	*	3	.0	.0	.0	*	.0	.0	1	.0	.0	.0	.0	.0	.0	1
26-32	.0	.0	.0	.0	*	.0	1	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	11	126	196	71	26	3	433	8	81	139	58	24	1	311	24	81	139	58	24	1	311
PCT	.3	3.2	4.9	1.8	.7	.1	10.9	.2	2.0	3.5	1.5	.6	*	7.8	.6	2.0	3.5	1.5	.6	*	7.8

HGT	E										SE										TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.3	.5	.0	.0	.0	.0	31	.1	.3	.0	.0	.0	.0	17	.0	.3	.0	.0	.0	.0	17
1-2	.1	1.0	.9	.0	.0	.0	79	*	1.0	.8	.0	.0	.0	71	.0	.6	.8	.0	.0	.0	71
3-4	*	.5	1.3	.2	.0	.0	82	.0	.6	1.1	.2	.0	.0	72	.0	.3	1.1	.2	.0	.0	72
5-6	*	.2	.7	.3	*	.0	50	.0	.3	.9	.3	*	.0	63	.0	.3	.9	.3	*	.0	63
7	.0	.2	.6	.6	.2	.0	60	.0	*	.5	.2	.0	.0	30	.0	.0	.5	.2	.0	.0	30
8-9	.0	.0	.4	.4	.1	.0	35	.0	.0	.2	.4	.1	.0	29	.0	.0	.2	.4	.1	.0	29
10-11	.0	.0	.1	.2	.1	.0	17	.0	.0	.2	.2	.1	.0	18	.0	.0	.2	.2	.1	.0	18
12	.0	.0	*	.1	.1	.0	7	.0	.0	*	.2	.0	.0	9	.0	.0	*	.2	.0	.0	9
13-16	.0	.0	*	.1	.1	.0	9	.0	.0	*	.1	.2	.0	15	.0	.0	*	.1	.2	.0	15
17-19	.0	.0	.0	.1	.0	.0	4	.0	.0	.0	.0	.1	.0	4	.0	.0	.0	.1	.0	.0	4
20-22	.0	.0	.0	*	*	.0	2	.0	.0	.0	.1	.0	.0	7	.0	.0	.0	.0	.0	.0	7
23-25	.0	.0	.0	.0	.0	.0	1	.0	.0	.0	.0	.0	.0	1	.0	.0	.0	.0	.0	.0	1
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	14	97	161	81	22	2	377	7	88	148	68	19	6	336	19	88	148	68	19	6	336
PCT	.4	2.4	4.0	2.0	.6	.1	9.5	.2	2.2	3.7	1.7	.5	.2	8.4	.5	2.2	3.7	1.7	.5	.2	8.4

PERIOD: (PRIMARY)  
 (OVER-ALL) 1963-1970

ANNUAL  
 TABLE 18

AREA 0009 ADAK  
 51-55N 172-180W

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.1	.6	.0	.0	.0	.0	25	.2	.4	.0	.0	.0	.0	21
1-2	.1	1.5	1.5	.0	.0	.0	124	*	1.1	1.1	.0	.0	.0	87
3-4	.1	.7	1.9	.4	.0	.0	121	.1	1.2	2.4	.4	.0	.0	158
5-6	.0	.5	1.9	.7	*	.0	122	.0	.4	1.8	.7	.1	.0	115
7	.0	*	1.2	.9	.1	.0	88	.0	.1	1.4	.9	*	.0	94
8-9	.0	*	.2	.7	.2	.1	42	.0	.1	.5	.7	.1	.0	51
10-11	.0	.0	.1	.3	.1	.0	17	.0	*	.4	.3	.1	.0	32
12	.0	.0	.0	.2	.2	.1	17	.0	.0	.1	.3	*	.1	16
13-16	.0	.0	.1	.2	.1	.1	17	.0	.0	.1	.2	.1	*	16
17-19	.0	.0	.0	*	.1	.0	3	.0	.0	.0	*	*	.0	3
20-22	.0	.0	.0	.0	.1	*	4	.0	.0	.0	.1	.1	.0	6
23-25	.0	.0	.0	.0	*	*	2	.0	.0	.0	*	.0	*	2
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.1	2
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	8	132	266	136	30	10	582	10	126	305	136	19	7	603
PCT	.2	3.3	6.7	3.4	.8	.3	14.6	.3	3.2	7.7	3.4	.5	.2	15.1

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	GRAND TOTAL
<1	.2	.8	.0	.0	.0	.0	39	.2	.6	.0	.0	.0	.0	32	210
1-2	.1	1.8	1.5	.0	.0	.0	135	.1	1.3	1.0	.0	.0	.0	92	752
3-4	*	1.4	2.6	.5	.0	.0	181	.1	1.1	1.7	.2	.0	.0	120	903
5-6	.0	.6	3.3	.8	*	.0	192	.0	.2	1.2	.5	*	.0	76	742
7	.0	.2	1.5	1.2	.1	*	121	.0	.1	.8	.5	.0	.0	55	551
8-9	.0	*	.6	.8	.1	*	63	.0	.1	.2	.5	.1	.0	37	309
10-11	.0	.0	.3	.7	.2	.1	45	.0	*	.2	.6	.1	.0	34	190
12	.0	.0	.2	.4	.1	.0	26	.0	.0	*	.3	*	.0	12	105
13-16	.0	*	.1	.4	.4	*	35	.0	.0	.1	.2	.2	.0	18	127
17-19	.0	.0	.0	.1	.1	.0	7	.0	.0	.0	.1	.0	*	5	34
20-22	.0	.0	.0	.2	*	.0	7	.0	.0	.0	*	*	.0	2	40
23-25	.0	.0	.0	*	.1	.0	5	.0	.0	.0	.0	*	.0	1	15
26-32	.0	.0	.0	.0	.1	*	3	.0	.0	.0	.0	.0	.0	0	8
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
TOTAL	12	195	402	200	45	6	860	13	129	208	114	18	2	484	3986
PCT	.3	4.9	10.1	5.0	1.1	.2	21.6	.3	3.2	5.2	2.9	.5	.1	12.1	100.0

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1970

ANNUAL

AREA 0009 ADAK  
51-55N 172-180W

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	3.6	4.0	.0	.0	.0	.0					311
1-2	.6	9.6	8.3	.0	.0	.0					755
3-4	.3	6.7	13.1	1.9	.0	.0					906
5-6	*	2.5	11.5	3.9	.2	.0					743
7	*	.7	7.1	4.9	.6	*					552
8-9	.0	.2	2.5	3.9	.8	.1					309
10-11	.0	.1	1.3	2.5	.7	*					190
12	.0	.0	.4	1.5	.6	.1					105
13-1	.0	*	.3	1.5	1.0	.3					127
17-19	.0	.0	*	.4	.3	.1					34
20-22	.0	.0	.0	.4	.4	.1					40
23-25	.0	.0	.0	.1	.2	.1					15
26-32	.0	.0	.0	.0	.1	.1					8
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	191	975	1825	864	203	37					4095
PCT	4.7	23.8	44.6	21.1	5.0	.9					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+ TOTAL	MEAN HGT
<6	1.1	8.3	11.1	6.1	2.6	1.2	.6	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3
6-7	.0	1.1	4.8	7.7	5.6	2.9	1.8	.9	1.2	.5	.4	.1	*	.0	.0	.0	.0	.0	.0	6
8-9	.0	.3	2.1	3.5	4.2	3.0	1.7	1.3	1.2	.5	.3	.2	*	.0	.0	.0	.0	.0	.0	7
10-11	.0	*	.3	.6	1.2	2.1	1.2	.7	.8	.2	.2	.1	.1	.0	.0	.0	.0	.0	.0	9
12-13	.0	.0	.0	.1	.1	.6	.2	.5	.6	*	.2	.1	*	.0	.0	.0	.0	.0	.0	11
>13	.0	*	.0	.1	.2	.1	.1	.1	.3	.0	.1	.1	*	.0	.0	.0	.0	.0	.0	12
INDET	11.5	.1	.1	*	.1	*	.1	*	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	622	488	904	887	684	487	289	164	217	56	60	29	11	.0	.0	.0	.0	.0	.0	5
PCT	12.6	9.9	18.4	18.0	13.9	9.9	5.9	3.7	4.4	1.1	1.2	.6	.2	.0	.0	.0	.0	.0	.0	100.0

PERIOD: (PRIMARY) 1943-1970  
(OVER-ALL) 1901-1970

AREA 0009 ADAK  
51-55N 172-180W

TABLE 20

PERCENT FREQUENCY OF OCCURRENCE OF SEA TEMP (DEG F) BY MONTH

SEA TMP DEG F	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	PCT
96+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
95/96	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
93/94	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
91/92	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
89/90	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
87/88	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
85/86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
83/84	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
81/82	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
79/80	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
77/78	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
75/76	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
73/74	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
71/72	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
69/70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
67/68	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
65/66	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
63/64	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
61/62	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
59/60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
57/58	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	*
55/56	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	15	.1
53/54	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	80	.4
51/52	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	229	1.2
49/50	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	587	3.2
47/48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1185	6.4
45/46	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1607	8.7
43/44	1.6	.2	1.5	1.9	3.1	2.4	2.3	12.1	12.1	17.7	17.2	5.3	3156	17.0
41/42	8.4	4.5	3.2	3.7	9.7	20.1	17.2	19.2	21.0	22.5	31.9	14.1	2976	16.0
39/40	12.3	7.6	10.1	11.4	23.1	30.4	19.7	18.8	23.7	22.5	32.2	33.4	2796	15.1
37/38	27.2	33.3	24.2	28.0	40.3	27.0	11.1	6.5	2.2	6.0	12.7	33.2	3033	16.3
35/36	8.2	11.3	16.4	13.2	18.2	14.4	3.8	1.2	.3	1.6	1.6	8.6	2085	11.2
33/34	1.7	3.5	3.5	2.7	4.1	4.3	.1	.0	.0	.2	.8	3.7	652	3.5
31/32	.4	.0	.5	.6	.1	.0	.0	.0	.0	.0	.0	.6	134	.7
29/30	.5	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	24	.1
27/28	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	8	*
<27	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2	*
TOTAL	1016	926	1074	1234	1802	2862	2325	2354	1676	1373	1002	928	18572	100.0
MEAN	39.1	38.4	38.3	38.5	40.0	42.5	45.4	47.5	47.9	45.8	42.7	40.6	43.0	



PERIOD: (PRIMARY) 1943-1970  
(OVER-ALL) 1901-1970

AREA 0009 ADAK  
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TABLE 21

PRESSURE (MB)

MO	AVERAGE BY HOUR (GMT)												TOTAL OBS	EXTREMES				
	0000	0300	0600	0900	1200	1500	1800	2100	MEAN	MAX	YEAR	DA		HR	MIN	YEAR	DA	HR
JAN	996	998	1001	993	1001	1002	1000	992	997	1279	1039	1950	23	00	953	1958	04	12
FEB	997	999	1000	996	1001	996	999	995	998	1158	1040	1950	04	12	958	1969	16	12
MAR	1007	1004	1007	1009	1006	1003	1006	1010	1007	1316	1041	1960	04	03	955	1949	21	12
APR	1008	1007	1010	1004	1012	1005	1011	1004	1008	1572	1038	1962	09	00	968	1964	06	15
MAY	1012	1011	1012	1012	1011	1010	1012	1010	1011	2121	1040	1964	08	12	972	1965	29	12
JUN	1012	1015	1013	1014	1012	1015	1012	1014	1013	3732	1037	1944	07	21	976	1949	10	12
JUL	1016	1016	1016	1015	1016	1016	1016	1015	1016	2892	1036	1943	13	00	984	1966	04	00
AUG	1013	1013	1012	1014	1013	1014	1013	1013	1013	2585	1038	1943	14	21	982	1964	30	06
SEP	1010	1008	1009	1009	1010	1010	1010	1009	1010	1881	1042	1944	20	09	975	1923	11	15
OCT	1008	1004	1008	1008	1008	1003	1008	1009	1008	1608	1042	1944	25	09	965	1960	29	18
NOV	1003	1002	1003	1002	1002	994	1003	1000	1002	1130	1043	1945	24	21	959	1958	03	06
DEC	1002	1002	1002	1000	1004	1003	1005	999	1002	1157	1047	1964	26	06	957	1943	26	21
ANN	1009	1012	1010	1008	1010	1010	1010	1008	1009	22531								
OBS	5362	1031	3332	2623	3401	975	3133	2674	1009									

PERCENTILES

MO	1%	5%	25%	50%	75%	95%	99%
JAN	962	971	985	997	1009	1024	1033
FEB	965	975	989	998	1007	1020	1028
MAR	968	980	998	1008	1018	1028	1035
APR	974	982	998	1009	1019	1029	1035
MAY	978	990	1003	1012	1020	1033	1037
JUN	985	995	1007	1015	1020	1028	1033
JUL	994	1001	1010	1017	1022	1027	1031
AUG	989	996	1006	1014	1020	1027	1031
SEP	979	990	1001	1011	1017	1028	1034
OCT	969	981	1000	1010	1017	1028	1037
NOV	964	976	992	1002	1012	1028	1039
DEC	964	975	992	1002	1013	1028	1038

JANUARY

PERIOD: (PRIMARY) 1944-1970  
(OVER-ALL) 1935-1970

AREA 0010 ATTU  
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TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FG WD	SMOKE HAZE	DUST BLWG	NO SIG WEA		
N	.2	.0	.5	.0	2.2	.0	.2	3.0	17	.0	.4	.0	.0	3.4	38	
NNE	.2	.0	.0	.0	1.1	.0	.0	1.3	7	.0	.4	.0	.0	5.0	37	
NE	.7	.2	.4	.0	1.8	.0	.0	2.9	16	.0	.5	.0	.0	3.8	40	
ENE	1.3	.0	.4	.0	1.3	.0	.4	3.0	17	.0	.4	.0	.0	4.5	44	
E	.4	.2	1.1	.2	2.5	.0	.2	4.3	24	.0	.4	.2	.0	6.1	61	
ESE	.5	.0	.5	.0	1.1	.0	.0	2.0	11	.0	.0	.0	.0	2.5	25	
SE	.7	.0	.5	.0	.5	.0	.0	1.8	10	.0	.0	.5	.0	3.6	33	
SSE	.0	.0	.0	.0	.2	.0	.0	.2	1	.0	.7	.0	.0	1.3	12	
S	1.1	.0	.7	.0	.4	.0	.0	2.0	11	.0	.7	.0	.0	4.7	41	
SSW	.0	.0	.2	.0	.5	.0	.0	.7	4	.0	.5	.0	.0	2.5	21	
SW	.2	.0	.0	.0	.2	.0	.0	.4	2	.0	.2	.7	.0	4.3	31	
WSW	.0	.0	.2	.0	.5	.0	.0	.7	4	.0	.0	.0	.0	3.8	25	
W	.0	.0	.2	.2	1.6	.0	.0	2.0	11	.0	.0	.0	.0	5.7	43	
WNW	.4	.0	.0	.0	1.1	.0	.2	1.6	9	.0	.0	.2	.0	2.9	26	
NW	.2	.2	.0	.0	1.3	.0	.0	1.6	9	.0	.0	.0	.0	5.0	37	
NNW	.0	.0	.2	.0	1.8	.0	.0	2.0	11	.0	.0	.0	.0	4.7	37	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0	
CALM	.0	.0	.2	.0	.0	.0	.0	.2	1	.0	.0	.0	.0	1.1	7	
TOT OBS	32	3	28	2	100	0	5	.2	165	0	23	9	0	361	558	
TOT PCT	5.7	.5	5.0	.4	17.9	.0	.9	29.6		.0	4.1	1.6	.0	64.7	100.0	

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FG WD	SMOKE HAZE	DUST BLWG	NO SIG WEA		
00003	5.4	.0	3.4	.0	23.5	.0	.7	32.2	48	.0	5.4	2.0	.0	60.4	149	
06009	6.9	.0	4.9	.0	18.8	.0	.7	30.6	44	.0	3.5	1.4	.0	64.6	144	
12015	4.7	1.6	5.5	.8	10.9	.0	.8	22.7	29	.0	2.3	.0	.0	75.0	128	
18021	5.4	.7	6.1	.7	19.0	.0	1.4	32.7	48	.0	4.8	2.7	.0	59.9	147	
TOT	32	3	28	2	104	0	5		169	0	23	9	0	367	568	
PCT	5.6	.5	4.9	.4	18.3	.0	.9	29.8		.0	4.0	1.6	.0	64.6	100.0	

JANUARY

PERIOD: (PRIMARY) 1944-1970  
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AREA 0010 ATTU  
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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)					
	0-3	4-10	11-21	22-33	34-47	48+	TOTAL OBS	PCT FREQ	MEAN SPD		00	03	06	09	12	15
N	.4	2.7	2.4	1.4	.4	.0	61	7.3	15.6		6.6	.0	5.1	8.1	8.0	.0
NNE	.1	1.7	1.4	1.9	1.1	.2	54	6.4	22.2		7.9	.0	9.4	6.3	8.8	10.0
NE	.0	3.3	3.1	2.7	.8	.0	84	10.0	17.9		11.5	.0	5.1	13.5	6.4	10.0
ENE	.1	.8	2.1	2.4	1.1	.2	57	6.8	23.7		4.4	33.3	11.1	9.9	7.2	.0
E	.4	2.9	3.7	4.0	1.7	.2	108	12.9	21.5		11.9	16.7	6.8	20.7	8.8	12.1
ESE	.0	1.5	1.7	1.2	.2	.0	39	4.6	17.3		4.4	.0	2.6	7.2	3.2	10.0
SE	.0	1.2	3.0	1.4	.6	.0	52	6.2	18.8		9.3	.0	5.1	5.4	5.6	.0
SSE	.1	1.9	1.0	.0	1.8	.0	16	1.9	13.6		2.6	16.7	1.7	.0	1.6	.0
S	.2	1.7	1.5	.8	.1	.0	53	6.3	20.4		7.0	.0	5.1	.9	12.0	.0
SSW	.1	.7	1.4	.7	.2	.0	27	3.2	18.3		3.5	.0	5.1	1.8	3.2	20.0
SW	.5	1.5	2.6	.6	.1	.0	45	5.4	13.5		4.4	16.7	7.7	8.1	4.0	.0
WSW	.7	1.0	1.1	.7	.1	.0	31	3.7	16.0		3.1	.0	2.6	1.8	6.4	.0
W	.1	2.3	2.9	1.2	.1	.0	55	6.5	15.0		5.3	.0	9.4	4.5	7.2	.0
WNW	.2	1.3	1.8	.4	.2	.0	33	3.9	14.5		2.6	16.7	7.7	2.7	4.8	.0
NW	.5	2.7	3.1	.5	.7	.0	63	7.5	15.1		7.5	.0	9.4	6.3	6.4	.0
NNW	.2	2.1	1.4	1.3	.8	.0	50	6.0	18.3		6.2	.0	5.1	.9	4.8	.0
VAR	1.4	.0	.0	.0	.0	.0	12	1.4	.0		.0	.0	.0	.0	.0	.0
CALM	43	239	287	179	85	7	840	100.0	17.9		227	6	117	1.8	1.6	.0
TOT OBS	5.1	28.5	34.2	21.3	10.1	.8					100.0	100.0	100.0	100.0	100.0	100.0
TOT PCT																

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)					
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD			00	03	06	09	12	15
N	2.3	4.0	4.3	2.4	.7	115	13.7	18.7			14.3	.0	14.5	14.4	16.8	10.0
NE	2.0	5.6	4.8	3.9	.5	141	16.8	20.3			15.9	33.3	16.2	23.4	13.6	10.0
E	1.7	5.8	4.9	4.0	1.1	147	17.5	20.4			16.3	16.7	9.4	27.9	12.0	60.0
SE	.8	3.1	3.1	1.1	.0	68	8.1	17.6			11.9	16.7	6.8	5.4	7.2	.0
S	1.8	3.3	1.3	2.9	.2	80	9.5	19.7			10.6	.0	10.3	2.7	15.2	20.0
SW	2.3	3.6	2.5	.6	.1	76	9.0	14.5			7.5	16.7	10.3	9.9	10.4	.0
W	1.7	5.1	2.9	.8	.0	88	10.5	14.8			7.9	16.7	17.1	7.2	12.0	.0
NW	3.2	4.9	2.6	2.1	.6	113	13.5	16.5			13.7	.0	14.5	7.2	11.2	.0
VAR	.0	.0	.0	.0	.0	0	.0	.0			.0	.0	.0	.0	.0	.0
CALM	1.4	298	221	150	27	840	1.4	.0			1.8	.0	.9	1.8	1.6	.0
TOT OBS	144	35.5	26.3	17.9	3.2						227	6	117	111	125	10
TOT PCT	17.1						100.0				100.0	100.0	100.0	100.0	100.0	100.0

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PERIOD: (PRIMARY) 1944-1970  
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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	WIND SPEED (KNOTS)								PCT FREQ	TOTAL OBS
	1-3	4-10	11-21	22-33	34-47	48+	CALM	MEAN		
00003	4.3	33.5	30.9	20.2	9.0	.4	1.7	16.5	100.0	233
06009	4.4	24.6	37.3	21.1	10.5	.9	1.3	18.3	100.0	228
12015	1.5	18.5	37.8	24.4	14.8	1.5	1.5	20.8	100.0	135
18021	3.7	32.8	32.4	20.9	8.2	.8	1.2	17.3	100.0	244
TOT	31	239	287	179	85	7	12	17.9		840
PCT	3.7	28.5	34.2	21.3	10.1	.8	1.4		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION				TOTAL OBS	MEAN CLOUD COVER
	0-2	3-4	5-7	8 & OBS		
N	.2	.9	2.1	2.8	26	6.5
NNE	.7	.9	1.9	4.0	32	6.4
NE	.0	.9	1.7	4.7	31	7.1
ENE	.0	.7	1.2	5.2	30	7.3
E	.5	.5	1.9	6.6	40	7.1
ESE	.2	.5	.9	2.1	16	6.4
SE	.0	.2	1.2	5.0	27	7.5
SSE	.0	.0	1.2	1.2	10	6.9
S	1.2	.9	.5	5.4	34	6.4
SSW	.9	.7	.9	1.4	17	5.3
SW	1.4	.7	2.4	1.4	25	5.1
WSW	.7	.9	1.7	1.7	21	5.6
W	.7	1.2	5.0	.9	33	5.3
WNW	1.2	.5	2.6	.7	21	5.1
NW	.2	.9	2.1	3.1	27	6.6
NNW	.5	.7	2.6	3.1	29	6.4
VAR	.0	.0	.0	.0	0	.0
CALM	.5	.2	.2	.2	5	4.0
TOT OBS	38	49	127	210	424	6.3
TOT PCT	9.0	11.6	30.0	49.5	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

WIND DIR	BY WIND DIRECTION					MEAN CLOUD COVER	AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION										TOTAL OBS
	0-2	3-4	5-7	8 & OBSD	TOTAL		000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	
N	.2	.9	2.1	2.8	26	.7	.0	.0	.2	1.9	.7	.9	.0	.0	.0	1.7	26
NNE	.7	.9	1.9	4.0	32	.5	.0	.0	.2	2.1	1.7	.7	.0	.0	.0	2.4	32
NE	.0	.9	1.7	4.7	31	.5	.0	.0	.9	2.1	1.7	.5	.0	.0	.0	1.7	31
ENE	.0	.7	1.2	5.2	30	.0	.0	.5	.5	1.9	2.1	1.4	.0	.0	.0	.7	30
E	.5	.5	1.9	6.6	40	1.2	.2	.2	.7	2.4	2.1	1.7	.0	.0	.0	.9	40
ESE	.2	.5	.9	2.1	16	.5	.0	.0	.0	1.4	.9	.0	.0	.0	.0	.9	16
SE	.0	.2	1.2	5.0	27	.9	.0	.0	.5	3.8	.5	.0	.2	.0	.0	.5	27
SSE	.0	.9	1.2	5.4	10	.2	.0	.0	.0	.7	.0	.9	.0	.0	.0	.5	10
S	1.2	.9	.5	5.4	34	.5	.0	.0	1.7	1.2	2.1	.2	.0	.0	.0	2.4	34
SSW	.9	.7	.9	1.4	17	.2	.0	.0	.2	1.2	.2	.5	.0	.0	.0	1.7	17
SW	1.4	.7	2.4	1.4	25	.2	.0	.0	.2	.5	1.7	.9	.0	.0	.0	2.4	25
WSW	.7	.9	1.7	1.7	21	.0	.0	.0	.2	.5	.9	.9	.0	.0	.0	2.4	21
W	.7	1.2	5.0	.9	33	.0	.0	.2	.5	1.4	1.4	.5	.2	.0	.2	3.3	33
WNW	1.2	.5	2.6	.7	21	.0	.0	.0	.0	.7	.7	1.9	.0	.0	.0	1.7	21
NW	.2	.9	2.1	3.1	27	.2	.0	.0	.7	.9	.9	1.4	.2	.0	.0	1.9	27
NNW	.5	.7	2.6	3.1	29	.0	.0	.2	.5	1.4	1.2	1.7	.0	.0	.0	1.9	29
VAR	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.5	.2	.2	.2	5	.0	.0	.0	.0	.2	.0	.2	.0	.0	.0	.7	5
TOT OBS	38	49	127	210	424	24	1	5	30	103	80	61	3	.0	.0	116	424
TOT PCT	9.0	11.6	30.0	49.5	100.0	5.7	.2	1.2	7.1	24.3	18.9	14.4	.7	.0	.2	27.4	100.0

PERIOD: (PRIMARY) 1944-1970  
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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH > 4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)									
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0		
= OR >6500	.0	.2	.2	.2	.2	.2	.2	.2		
= OR >5000	.2	.7	.9	.9	.9	.9	.9	.9		
= OR >3500	2.6	12.6	14.0	14.5	14.5	14.5	15.2	15.4		
= OR >2000	8.6	25.2	29.7	32.0	32.5	32.5	33.6	33.9		
= OR >1000	17.1	41.1	50.7	55.4	55.8	56.1	57.7	57.9		
= OR >600	18.9	46.5	57.2	62.1	62.6	62.9	64.7	65.0		
= OR >300	19.6	47.4	58.4	63.3	63.8	64.0	65.9	66.1		
= OR >150	19.6	47.4	58.4	63.6	64.0	64.3	66.1	66.4		
= OR > 0	19.9	49.3	61.7	67.3	68.0	68.9	72.0	72.2		
TOTAL	85	211	264	288	291	295	308	309		

TOTAL NUMBER OF OBS: 428

PCT FREQ NH <5/8: 27.8

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

										TOTAL OBS
0	1	2	3	4	5	6	7	8	OBSCD	
1.3	.9	10.2	5.0	9.1	8.0	12.5	8.0	39.7	5.4	463

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PERIOD: (PRIMARY) 1944-1970  
(OVER-ALL) 1935-1970

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.2	.2	.4	.0	.2	.5	.0	.0	.0	.2	.0	.2	.2	.2	.2	.0	.0	.0	13	2.3
NO PCP	.0	.4	.4	.0	.2	.0	.0	.5	.4	.2	.0	.0	.0	.0	.0	.0	.0	.0	11	2.0
TOTAL	1	3	4	0	2	3	0	3	2	2	0	1	1	1	1	0	0	0	24	4.3
PCP	.5	.0	.0	1.1	.4	.0	.0	.0	.2	.0	.0	.4	.4	.0	.4	.4	.0	.0	20	3.6
NO PCP	.0	.0	.2	.0	.4	.0	.0	.2	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	5	.9
TOTAL	3	0	1	6	4	0	0	1	1	0	1	2	2	0	2	2	0	0	25	4.5
PCP	.5	.5	.7	.5	1.1	.9	.9	.2	.4	.2	.2	.0	.0	.2	.5	.7	.0	.0	42	7.6
NO PCP	.0	.0	.2	.4	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	6	1.1
TOTAL	3	3	5	5	8	5	5	1	2	1	1	0	0	1	4	4	0	0	48	8.6
PCP	.9	.2	1.3	.7	2.2	.4	.7	.0	.5	.0	.0	.0	.7	.9	.4	.4	.0	.2	52	9.4
NO PCP	.5	.4	.4	.4	.5	.2	.7	.0	1.4	.2	.4	.0	.4	.2	.2	1.3	.0	.0	39	7.0
TOTAL	8	3	9	6	15	3	8	0	11	1	2	0	6	6	3	9	0	1	91	16.4
PCP	.7	.5	.5	.7	.5	.2	.2	.0	.7	.4	.2	.2	.4	.2	.0	.5	.0	.0	33	5.9
NO PCP	2.2	2.2	1.6	2.0	2.7	1.1	1.3	.7	1.4	1.4	1.8	1.8	2.9	.9	2.9	2.7	.0	.0	163	29.3
TOTAL	16	15	12	15	18	7	8	4	12	10	11	10	18	6	16	18	0	0	196	35.3
PCP	.2	.0	.2	.0	.0	.0	.0	.0	.2	.0	.0	.0	.2	.0	.0	.0	.0	.0	4	.7
NO PCP	1.1	2.5	1.6	2.2	2.5	1.3	2.2	.5	2.2	1.3	2.9	2.0	2.5	2.0	1.8	.7	.0	1.1	168	30.2
TOTAL	7	14	10	12	14	7	12	3	13	7	16	11	15	11	10	4	0	6	172	30.9
TOTAL	38	38	41	44	61	25	33	12	41	21	31	24	42	25	36	37	0	7	556	100.0
PCT	6.8	6.8	7.4	7.9	11.0	4.5	5.9	2.2	7.4	3.8	5.6	4.3	7.6	4.5	6.5	6.7	.0	1.3	100.0	

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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	1	.1
	4-10	.0	.1	.1	.0	.0	.1	.0	.1	.2	.1	.0	.1	.0	.0	.0	.1	.0	.0	8	1.0
	11-21	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0	.0	.1	.1	.1	.1	.0	.0	.0	9	1.1
	22+	.1	.2	.2	.1	.5	.1	.0	.0	.0	.1	.0	.1	.0	.0	.0	.0	.0	.0	13	1.6
	TOTAL	1	3	4	1	4	3	0	3	2	2	0	3	1	1	2	1	0	0	31	3.7
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.2	.1	.0	.0	.0	.0	.0	4	.5
	4-10	.2	.1	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.4	.0	.0	.2	.0	.0	12	1.4
	11-21	.0	.1	.2	.4	.0	.0	.0	.0	.1	.0	.0	.0	.1	.0	.1	.1	.0	.0	10	1.2
	22+	.1	.0	.4	.6	.2	.0	.1	.0	.0	.0	.0	.0	.2	.1	.1	.0	.0	.0	16	1.9
	TOTAL	3	2	5	8	5	0	1	1	1	0	1	2	7	1	2	3	0	0	42	5.0
1<2	0-3	.1	.0	.0	.1	.1	.0	.0	.0	.0	.0	.0	.2	.0	.1	.1	.1	.0	.0	8	1.0
	4-10	.6	.1	.4	.1	.5	.4	.1	.1	.1	.0	.1	.1	.1	.0	.5	.2	.0	.0	29	3.5
	11-21	.1	.1	.5	.0	.5	.5	.4	.0	.0	.1	.1	.1	.1	.0	.2	.2	.0	.0	25	3.0
	22+	.1	.2	.5	.4	.5	.1	.2	.1	.2	.0	.0	.0	.0	.1	.0	.1	.0	.0	22	2.6
	TOTAL	8	4	11	5	13	8	6	2	3	1	2	4	2	2	7	6	0	0	84	10.0
2<5	0-3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.5	6	.7
	4-10	.5	.1	.4	.4	.2	.5	.2	.1	.4	.1	.5	.0	.5	.2	.8	.5	.0	.0	45	5.4
	11-21	.4	.4	.7	.2	.8	.0	.6	.0	.2	.0	.0	.0	.1	.5	.4	.2	.0	.0	38	4.5
	22+	.4	.8	1.3	1.0	1.7	.4	.5	.0	1.1	.1	.0	.0	.2	.2	.4	.7	.0	.0	73	8.7
	TOTAL	11	11	20	13	23	7	11	1	14	2	5	0	7	8	13	12	0	4	162	19.4
5<10	0-3	.1	.1	.0	.0	.1	.0	.0	.0	.2	.1	.2	.2	.0	.0	.1	.1	.0	.2	14	1.7
	4-10	.6	.2	1.0	.1	.5	.4	.4	.1	.4	.4	.1	.2	.7	.4	.7	.7	.0	.0	57	6.8
	11-21	1.6	.6	.8	.5	1.0	.2	.8	.4	.4	.2	.8	.1	1.6	.5	1.3	.6	.0	.0	95	11.4
	22+	.6	1.2	.7	1.2	2.0	.6	.4	.0	1.0	.7	.4	.6	.2	.0	.4	1.1	.0	.0	92	11.0
	TOTAL	24	18	21	15	30	10	13	4	16	12	13	10	21	7	21	21	0	2	258	30.9
10+	0-3	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0	.0	.1	.1	.0	.0	.7	10	1.2
	4-10	.8	1.0	1.6	.2	1.3	.2	.5	.2	.8	.1	.8	.5	.6	.7	.6	.4	.0	.0	87	10.4
	11-21	.4	.2	.7	1.1	1.4	.8	1.2	.2	.8	1.1	1.7	.6	.8	.7	1.0	.2	.0	.0	109	13.0
	22+	.5	.7	.5	.5	1.1	.2	.8	.0	.4	.0	.4	.2	.5	.0	.4	.2	.0	.0	53	6.3
	TOTAL	14	16	23	15	33	11	21	5	17	10	24	11	16	13	17	7	0	6	259	31.0
	TOTAL	61	54	84	57	108	39	52	16	53	27	45	30	54	32	62	50	0	12	836	100.0
	PCT	7.3	6.5	10.0	6.8	12.9	4.7	6.2	1.9	6.3	3.2	5.4	3.6	6.5	3.8	7.4	6.0	.0	1.4	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH > 4/8), AND  
OCCURRENCE OF NH < 5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH < 5/8 ANY HGT	TOTAL OBS
00003	3.6	.0	.9	7.2	29.7	21.6	11.7	.0	.0	.0	74.8	25.2	111
06009	5.8	.0	1.0	8.7	22.1	20.2	17.3	1.0	.0	.0	76.0	24.0	104
12015	3.6	.9	1.8	5.4	24.1	17.0	13.4	.0	.0	.9	67.0	33.0	112
18021	10.4	.0	.9	6.6	18.9	15.0	15.1	1.9	.0	.0	69.8	30.2	106
TOT	25	1	5	30	103	81	62	3	0	1	311	122	433
PCT	5.8	.2	1.2	6.9	23.8	18.7	14.3	.7	.0	.2	71.8	28.2	100.0

TABLE 11

PERCENT FREQUENCY VS8Y (NH) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	5.6	.0	4.6	12.0	29.6	48.1	108
06009	4.9	.0	5.8	13.6	35.9	39.8	103
12015	5.4	.9	7.1	13.4	42.0	31.3	112
18021	1.0	1.9	6.7	12.4	46.7	31.4	105
TOT	18	3	26	55	165	161	428
PCT	4.2	.7	6.1	12.9	38.6	37.6	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VS8Y (NH) AND/OR  
CEILING HGT (FEET, NH > 4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH < 5/8 AND 5+	TOTAL OBS
00003	3.7	7.4	29.6	46.3	24.1	108
06009	5.8	8.7	33.0	43.7	23.3	103
12015	4.5	11.6	33.0	34.8	32.1	112
18021	10.5	12.4	32.4	40.0	27.6	105
TOT	26	43	137	176	115	428
PCT	6.1	10.0	32.0	41.1	26.9	100.0



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TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
45/49	.0	.0	.0	.4	.2	.0	.6	.0	6	1.3
40/44	.0	.0	.0	.0	1.5	1.5	3.1	8.8	71	14.9
35/39	.0	.0	.0	.6	2.9	6.1	11.9	19.7	197	41.3
30/34	.0	.0	.0	.2	2.7	5.7	11.3	13.4	159	33.3
25/29	.0	.0	.0	.0	.2	.4	2.3	4.6	36	7.5
20/24	.0	.0	.0	.0	.0	.2	.4	1.0	8	1.7
TOTAL	0	0	0	6	36	66	142	227	477	100.0
PCT	.0	.0	.0	1.3	7.5	13.8	29.8	47.6		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
45/49	.0	.2	.2	.6	.2	.0	.0	.0	.0	.0
40/44	.8	1.7	4.2	2.9	2.1	1.3	.2	1.5	.0	.2
35/39	3.8	6.9	11.7	3.1	4.0	4.8	3.6	2.9	.0	.4
30/34	5.9	6.5	4.8	2.1	2.9	2.5	2.5	5.7	.0	.4
25/29	2.7	1.9	.2	.0	.6	.2	.4	1.5	.0	.0
20/24	1.0	.2	.0	.0	.0	.0	.0	.4	.0	.0
TOTAL	68	83	101	42	47	42	32	57	0	5
PCT	14.3	17.4	21.2	8.8	9.9	8.8	6.7	11.9	.0	1.0

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	46	44	42	35	27	23	21	34.6	233
06009	47	45	41	34	27	24	23	34.4	232
12015	44	43	39	34	27	23	23	33.2	137
18021	45	42	41	34	26	23	22	33.7	246
TOT	47	44	41	34	27	23	21	34.1	848

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	.7	4.2	14.1	30.3	50.7	87	142
06009	.0	1.4	9.9	12.1	35.5	41.1	85	141
12015	.0	2.3	11.4	13.6	25.0	47.7	86	44
18021	.0	1.3	7.2	15.0	25.5	51.0	87	153
TOT	0	6	36	66	143	229	86	480

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TABLE 17  
PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AREA 0010 ATTU  
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AIR-SEA TMP DIF	21	25	29	33	37	41	45	TOT	W FOG	WD FOG
	24	28	32	36	40	44	48			
7/8	.0	.0	.0	.0	.0	.5	.5	4	.7	.2
6	.0	.0	.0	.0	.0	.0	.2	1	.0	.2
4	.0	.0	.0	.0	.5	1.2	.0	7	.2	1.4
3	.0	.0	.0	.0	.5	1.2	.0	7	.2	1.4
2	.0	.0	.0	.0	1.9	.9	.0	12	.2	2.5
1	.0	.0	.0	.5	1.9	.5	.0	12	.2	2.5
0	.0	.0	.0	1.4	7.4	.0	.0	38	.5	8.3
-1	.0	.0	.0	2.1	5.3	.2	.0	33	.2	7.4
-2	.0	.0	.0	6.0	1.9	.0	.0	34	.5	7.4
-3	.0	.0	.0	7.9	.7	.0	.0	37	.0	8.6
-4	.0	.0	.9	8.6	.2	.0	.0	42	.0	9.7
-5	.0	.0	1.2	5.1	.5	.0	.0	29	.0	6.7
-6	.0	.0	6.0	2.1	.5	.0	.0	37	.0	8.6
-7/-8	.0	.7	10.9	3.0	.0	.0	.0	63	.0	14.6
-9/-10	.0	6.0	3.5	.9	.0	.0	.0	45	.0	10.4
-11/-13	.5	2.3	1.4	.2	.0	.0	.0	19	.0	4.4
-14/-16	2.3	.5	.0	.0	.0	.0	.0	12	.0	2.8
TOTAL	12	41	103	163	91	19	3	432	12	420
PCT	2.8	9.5	23.8	37.7	21.1	4.4	.7	100.0	2.8	97.2

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N						NE						TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	1-3	4-10	11-21	22-33	34-47	48+			
<1	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0	.0	0	.0	1
1-2	.0	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	.0	1
3-4	.0	1.5	2.5	.0	.0	.0	.0	.0	1.0	.0	.0	.0	8	.0	2
5-6	.0	.0	1.0	.5	.0	.0	.0	.0	2.0	1.0	.0	.0	3	.0	6
7	.0	.5	.0	.5	.0	.0	.0	.0	.5	1.0	.0	.0	2	.0	3
8-9	.0	.0	.0	1.0	1.0	.0	.0	.0	.0	.0	.0	.0	4	.0	0
10-11	.0	.0	.0	.0	.5	.0	.0	.0	.0	.5	.0	.0	1	.0	1
12	.0	.0	.5	1.5	.5	.0	.0	.0	.0	.0	.0	.0	5	.0	0
13-16	.0	.0	.0	1.5	1.0	.0	.0	.0	.0	1.0	1.0	.0	3	.0	4
17-19	.0	.0	.0	1.0	.5	.0	.0	.0	.0	.5	.0	.0	1	.0	1
20-22	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	0	7	8	13	7	0	0	1	7	8	2	0	35	0	18
PCT	.0	3.4	3.9	6.4	3.4	.0	.0	.5	3.4	3.9	1.0	.0	17.2	.0	8.9

HGT	E						SE						TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	1-3	4-10	11-21	22-33	34-47	48+			
<1	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1	.0	0
1-2	.0	1.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2	.0	0
3-4	.0	.5	1.5	.0	.0	.0	.0	.5	.0	.0	.0	.0	4	.0	1
5-6	.0	.0	1.5	1.5	.0	.0	.0	.0	2.0	.0	.0	.0	6	.0	4
7	.0	.0	1.5	2.0	.0	.0	.0	.5	.5	.0	.0	.0	7	.0	2
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0	0	.0	1
12	.0	.0	.0	.5	.5	.0	.0	.0	.5	.5	.0	.0	1	.0	1
13-16	.0	.0	.0	.5	.5	.0	.0	.0	.0	.0	1.0	.0	2	.0	2
17-19	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	1	.0	0
20-22	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0	1	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	0	4	9	10	2	0	0	2	6	1	2	0	25	0	11
PCT	.0	2.0	4.4	4.9	1.0	.0	.0	1.0	3.0	.5	1.0	.0	12.3	.0	5.4

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)												
HGT	S					SW					48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47		
<1	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0	.0	1
1-2	.0	.5	.5	.0	.0	.0	1.5	1.0	.0	.0	.0	5
3-4	.0	.0	.0	.0	.0	.0	.5	1.5	.5	.0	.0	5
5-6	.0	.0	.0	.0	.0	.0	.0	1.0	.5	.0	.0	3
7	.0	.0	1.5	1.0	.0	.0	.0	.5	.5	.0	.0	2
8-9	.0	.0	.0	.0	.0	.0	.0	1.0	.5	.0	.0	3
10-11	.0	.0	.5	.0	.5	.0	.5	.5	.0	.0	.0	2
12	.0	.0	.0	.0	1.5	.0	.0	.0	2.0	.5	.0	5
13-16	.0	.0	.0	.0	3.0	.0	.0	.5	.0	.0	.0	1
17-19	.0	.0	.0	.0	1.5	.0	.0	.0	.5	.0	.0	1
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	0	1	5	2	13	0	6	12	9	1	0	28
PCT	.0	.5	2.5	1.0	6.4	.0	3.0	5.9	4.4	.5	.0	13.8

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)												
HGT	W					NW					48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47		
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
1-2	.0	1.0	1.5	.0	.0	.0	.0	1.0	.0	.0	.0	2
3-4	.0	1.5	3.0	.5	.0	.0	.0	.5	.0	.0	.0	1
5-6	.0	.5	2.5	1.0	.0	.0	.0	2.5	.0	.0	.0	5
7	.0	.0	1.0	1.0	.0	.5	.0	3.4	.5	.0	.0	9
8-9	.0	.0	.5	.5	.0	.0	.0	.5	1.5	1.0	.0	6
10-11	.0	.0	.0	.5	.0	.0	.0	.0	1.5	.0	.0	3
12	.0	.0	.0	.5	.0	.0	.0	.0	1.5	.5	.0	1
13-16	.0	.0	.0	.5	.0	.0	.0	.0	1.5	.0	.0	5
17-19	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0	2
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	0	6	17	9	1	1	0	16	10	5	0	32
PCT	.0	3.0	8.4	4.4	.5	.5	.0	7.9	4.9	2.5	.0	15.8
GRAND TOTAL												203
												100.0

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TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	3.3	1.4	.0	.0	.0	.0					10
1-2	.0	5.2	3.8	.0	.0	.0					19
3-4	.0	4.3	9.5	1.0	.0	.0					31
5-6	.0	.5	11.9	4.3	.0	.0					35
7	.5	1.0	8.6	6.2	.0	.0					34
8-9	.0	.0	1.9	3.3	1.9	.0					15
10-11	.0	.5	1.4	2.4	1.0	.0					11
12	.0	.0	.5	4.8	2.9	.0					17
13-16	.0	.0	.5	4.8	7.1	.0					26
17-19	.0	.0	.0	2.4	2.4	.0					10
20-22	.0	.0	.0	.5	.5	.0					2
23-25	.0	.0	.0	.0	.0	.0					0
26-32	.0	.0	.0	.0	.0	.0					0
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	8	27	80	62	33	.0					210
PCT	3.8	12.9	38.1	29.5	15.7	.0					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+ TOTAL	MEAN HGT
<6	.0	4.8	5.9	5.4	1.7	.8	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	70
6-7	.0	.3	6.5	6.8	9.0	5.1	2.8	1.1	1.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	126
8-9	.0	.6	3.4	3.4	4.5	1.1	1.7	5.4	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	94
10-11	.0	.3	.0	.3	.0	.3	.6	.3	.8	.0	.6	.6	.0	.0	.0	.0	.0	.0	.0	15
12-13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2
>13	.0	.0	.0	.0	.0	.0	.3	.0	.0	.6	.3	.0	.0	.0	.0	.0	.0	.0	.0	4
INDET	11.9	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	13
TOTAL	42	21	56	56	56	26	23	24	32	13	3	2	0	0	0	0	0	0	0	43
PCT	11.9	5.9	15.8	15.8	15.8	7.3	6.5	6.8	9.0	3.7	.8	.6	.0	.0	.0	.0	.0	.0	.0	354
																				100.0

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TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FG WD PCPN	SMOKE HAZE	DUST BLWG	NO DUST BLWG	SIG WEA	
N	.2	.2	.4	.0	5.7	.0	.2	6.5	37	.0	.4	.2	.0	.0	5.5	71
NNE	.2	.0	.0	.0	3.4	.0	.0	3.4	19	.0	.0	.0	.0	.0	2.5	33
NE	.7	.0	.0	.0	4.4	.0	.0	5.0	28	.2	.4	.0	.4	.0	6.5	70
ENE	.2	.0	.7	.0	1.1	.0	.0	1.9	11	.2	.2	.0	.0	.0	4.1	36
E	.0	.0	.2	.0	2.8	.2	.0	3.2	18	.0	.0	.0	.0	.0	6.2	54
ESE	.7	.2	.2	.0	1.6	.0	.0	2.7	15	.0	.4	.0	.0	.0	4.8	44
SE	.4	.2	.0	.0	.9	.0	.0	1.4	8	.0	.0	.0	.0	.0	4.1	31
SSE	.4	.0	.2	.0	.5	.0	.0	1.1	6	.0	.0	.2	.0	.0	3.0	24
S	.5	.0	.0	.0	1.1	.0	.0	1.6	9	.0	.0	.2	.0	.0	2.7	25
SSW	.2	.0	.0	.0	.4	.0	.0	.5	3	.0	.0	.0	.0	.0	1.9	14
SW	.2	.0	.2	.0	1.6	.0	.0	1.8	10	.0	.0	.0	.0	.0	3.0	27
WSW	.2	.2	.0	.0	.7	.0	.0	1.1	6	.0	.0	.0	.0	.0	4.1	29
W	.2	.0	.0	.0	1.2	.0	.0	1.4	8	.0	.2	.0	.0	.0	4.4	34
WNW	.2	.0	.0	.0	.7	.0	.0	.7	4	.0	.0	.0	.0	.0	2.8	20
NW	.2	.0	.0	.0	2.5	.0	.0	2.7	15	.0	.0	.0	.0	.0	1.2	22
NNW	.4	.0	.0	.0	1.1	.0	.0	1.4	8	.0	.0	.0	.2	.0	2.8	25
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
CALM	.0	.0	.0	.0	.2	.0	.0	.2	1	.0	.0	.0	.0	.0	.9	6
TOT OBS	26	4	10	0	168	1	1	206		2	8	4	3	3	342	565
TOT PCT	4.6	.7	1.8	.0	29.7	.2	.2	36.5		.4	1.4	.7	.5	.5	60.5	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FG WD PCPN	SMOKE HAZE	DUST BLWG	NO DUST BLWG	SIG WEA	
0003	5.0	.0	1.3	.0	35.0	.0	.0	40.0	64	.6	1.9	.0	.0	.0	57.5	160
0609	3.2	2.5	2.6	.0	29.5	.6	.6	39.1	61	.0	.6	.6	.6	.6	59.0	156
12015	3.4	.0	1.7	.0	20.5	.0	.0	25.6	30	.0	.9	.0	.0	.0	73.5	117
18021	6.2	.0	1.4	.0	31.7	.0	.0	37.9	55	.7	2.1	2.1	1.4	55.9	145	
TOT	26	4	10	0	172	1	1	210	210	2	8	4	3	3	351	578
PCT	4.5	.7	1.7	.0	29.8	.2	.2	36.3		.3	1.4	.7	.5	.5	60.7	100.0

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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)					48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)						15	18	21
	0-3	4-10	11-21	22-33	34-47					00	03	06	09	12				
N	.9	2.3	4.9	2.7	.6	.3	103	11.7	18.2	11.3	.0	13.3	15.3	12.7	10.0	10.8	7.8	
NNE	.2	1.1	1.7	2.0	.5	.0	49	5.6	19.9	4.7	60.0	8.3	6.9	4.2	.0	6.3	2.3	
NE	.6	2.0	5.0	2.6	1.1	.1	101	11.5	19.5	12.9	.0	10.8	6.1	11.9	10.0	15.3	11.6	
ENE	.0	.8	1.6	2.5	.2	.0	45	5.1	21.7	4.7	.0	7.5	3.8	9.3	10.0	3.6	2.3	
E	.3	1.9	2.8	3.3	.9	.1	83	9.4	20.6	10.2	.0	12.5	10.7	4.2	20.0	9.0	8.5	
ESE	.1	.7	2.4	2.2	.8	.1	55	6.3	23.4	5.9	.0	5.8	3.8	9.3	10.0	9.9	3.9	
SE	.1	2.4	2.7	1.3	.2	.0	59	6.7	15.9	7.4	.0	6.7	8.4	5.9	.0	2.7	8.5	
SSE	.0	.2	1.4	1.0	.3	.1	27	3.1	23.4	1.6	.0	5.0	3.1	5.9	.0	3.6	1.6	
S	.5	1.8	2.0	.6	.6	.0	48	5.5	15.4	5.1	.0	4.2	7.6	5.1	.0	3.6	7.8	
SSW	.0	.8	1.1	.6	.0	.1	23	2.6	17.7	3.1	20.0	2.5	.0	1.7	10.0	2.7	3.9	
SW	.3	2.8	2.2	1.0	.8	.0	63	7.2	15.6	7.8	.0	3.3	8.4	5.1	.0	6.3	11.6	
WSW	.0	1.1	.7	1.3	.6	.2	34	3.9	22.9	2.7	.0	5.8	3.1	5.9	.0	5.4	2.3	
W	.2	2.0	2.5	1.5	.8	.1	63	7.2	18.3	7.8	.0	2.5	10.7	4.2	20.0	9.0	7.0	
WNW	.2	.7	1.1	.7	.2	.0	26	3.0	17.4	3.9	20.0	4.2	.0	3.4	.0	4.5	.8	
NW	.3	2.5	2.2	.8	.1	.0	52	5.9	13.0	5.5	.0	2.5	8.4	.8	.0	2.7	15.5	
NNW	.3	1.3	1.7	.8	.2	.0	38	4.3	15.8	4.3	.0	4.2	2.3	7.6	10.0	4.5	3.1	
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	1.3	216	317	218	70	11	11	1.3	.0	1.2	.0	.8	1.5	2.5	.0	.0	1.6	
TOT OBS	48	36.0	36.0	24.8	8.0	1.3	880	100.0	18.4	256	5	120	131	118	10	111	129	
TOT PCT	5.5	24.5	24.5	16.5	5.3	1.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-6	7-16	17-27	28-40	00					03	06	09	12	15	18	21	
N	1.9	6.4	5.7	2.8	.5	152	17.3	18.8	16.0	60.0	21.7	22.1	16.9	10.0	17.1	10.1	
NE	1.0	5.7	5.9	3.4	.6	146	16.6	20.2	17.6	.0	18.3	9.9	21.2	20.0	18.9	14.0	
E	1.8	3.3	5.7	4.3	.6	138	15.7	21.7	16.0	.0	18.3	14.5	13.6	30.0	18.9	12.4	
SE	1.3	3.2	3.9	1.4	.1	86	9.8	18.3	9.0	.0	11.7	11.5	11.9	.0	6.3	10.1	
S	1.7	2.8	2.6	.7	.2	71	8.1	16.1	8.2	20.0	6.7	7.6	6.8	10.0	6.3	11.6	
SW	2.0	4.1	3.2	.8	.9	97	11.0	18.1	10.5	.0	9.2	11.5	11.0	.0	11.7	14.0	
W	1.3	4.5	2.2	1.9	.2	89	10.1	18.0	11.7	20.0	6.7	10.7	7.6	20.0	13.5	7.8	
NW	2.6	4.2	2.7	.6	.1	90	10.2	14.2	9.8	.0	6.7	10.7	8.5	10.0	7.2	18.6	
VAR	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	
CALM	1.3					11	1.3	.0	1.2	.0	.8	1.5	2.5	.0	.0	1.6	
TOT OBS	131	301	280	140	28	880		18.4	256	5	120	131	118	10	111	129	
TOT PCT	14.9	34.2	31.8	15.9	3.2		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	1-3	4-10	11-21	WIND SPEED (KNOTS)			CALM	MEAN	PCT	
				22-33	34-47	48+			FREQ	TOTAL OBS
0003	3.1	26.1	36.4	24.1	7.3	1.9	1.1	18.3	100.0	261
0609	6.0	27.9	31.1	26.3	6.8	.8	1.2	17.5	100.0	251
1215	.8	14.1	43.0	28.1	10.9	.8	2.3	21.0	100.0	128
1821	5.4	25.0	37.1	22.1	8.3	1.3	.8	17.8	100.0	240
TOT	37	216	317	218	70	11	11	18.4		880
PCT	4.2	24.5	36.0	24.8	8.0	1.3	1.3		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 &	TOTAL OBS	MEAN CLOUD COVER	
						8	16
N	.3	.3	4.6	6.2	44	6.9	
NNE	.0	.5	2.3	3.3	24	6.8	
NE	.0	.8	4.6	7.4	50	7.1	
ENE	.0	.0	2.6	3.6	24	7.1	
E	.3	1.0	2.1	6.2	37	7.0	
ESE	.3	.5	2.1	5.1	31	7.0	
SE	.0	.8	1.5	3.6	23	7.0	
SSE	.8	.3	1.3	2.6	19	6.0	
S	.8	.3	1.3	1.8	16	5.7	
SSW	.3	.3	1.0	1.3	11	6.4	
SW	.0	2.1	.8	1.5	17	5.5	
WSW	.5	.5	2.1	1.8	19	6.1	
W	.0	1.8	2.1	2.3	24	6.0	
WNW	.0	.8	2.1	1.8	18	6.7	
NW	.0	.0	1.0	.8	7	6.6	
NNW	.0	.3	2.3	2.8	21	6.9	
VAR	.0	.0	.0	.0	0	.0	
CALM	.3	.5	.5	.0	5	4.2	
TOT OBS	13	41	133	203	390	6.6	
TOT PCT	3.3	10.5	34.1	52.1	100.0		

TABLE 5

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	000	149	150	299	300	599	600	999	1000	2000	3499	4999	5000	6499	7999	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.0	.3	.0	.0	.3	.0	.0	.0	4.4	1.8	2.1	.5	.5	.0	.3	1.5	.3	44
NNE	.3	.0	.0	.0	.5	.0	.5	.5	2.1	1.3	.5	.5	.5	.0	.0	.5	.5	24
NE	1.0	.0	.0	.0	.0	.0	.3	.0	5.4	3.1	1.5	.0	.0	.0	.0	1.5	.0	50
ENE	.0	.0	.0	.0	.0	.0	.5	.0	1.8	1.8	1.8	.0	.0	.0	.0	.3	.0	24
E	.5	.0	.0	.0	.0	.0	.5	.0	1.8	3.1	1.5	.5	.3	.0	.0	1.3	.0	37
ESE	.5	.0	.0	.0	.3	.0	.8	.5	.5	3.6	.5	.0	.3	.0	.0	1.5	.0	31
SE	.0	.0	.0	.0	.0	.0	.3	.0	2.1	1.8	.5	.0	.3	.0	.0	1.0	.0	23
SSE	.3	.0	.0	.0	.5	.0	.3	.0	1.0	1.0	1.0	.0	.0	.0	.0	1.0	.0	19
S	.0	.0	.0	.0	.5	.0	.3	.0	.5	1.0	.3	.0	.3	.0	.0	1.3	.0	16
SSW	.0	.0	.0	.0	.5	.0	.0	.0	.0	1.3	.3	.0	.0	.0	.0	.5	.0	11
SW	.3	.0	.0	.0	.3	.0	.3	.3	.3	.8	.5	.0	.0	.0	.0	2.1	.0	17
WSW	.0	.0	.3	.0	.3	.0	1.0	.8	.8	.5	.0	.0	.0	.0	.0	2.1	.0	19
W	.0	.0	.0	.0	.0	.0	.8	.5	1.3	1.0	.3	.0	.0	.0	.0	2.3	.0	24
WNW	.0	.0	.0	.0	.0	.0	1.0	1.3	1.3	1.0	.3	.0	.0	.0	.0	1.0	.0	18
NW	.0	.0	.0	.0	.0	.0	.0	.8	.8	.5	.3	1.5	.3	.0	.0	.5	.3	7
NNW	.5	.0	.0	.0	.5	.0	.5	.5	1.5	.3	.0	.0	.3	.0	.0	.3	.0	21
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	5
TOT OBS	13	3.3	.3	.3	14	3.6	27	25.4	99	93	51	7	.0	.0	.0	1.0	.0	390
TOT PCT	3.3	10.5	34.1	52.1	100.0													100.0



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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)									
	OR >10	OR >5	OR >2	OR >1	OR >1/2	OR >1/4	OR >50yd	OR >0		
OR >6500	.0	1.3	2.0	2.0	2.0	2.0	2.0	2.0		
OR >5000	.5	2.5	4.0	4.0	4.0	4.0	4.0	4.0		
OR >3500	1.5	10.3	15.0	16.3	16.3	16.3	16.3	16.3		
OR >2000	9.8	28.6	36.6	38.3	39.1	39.6	40.1	40.4		
OR >1000	16.5	45.6	57.9	60.9	62.2	63.2	64.9	65.4		
OR >600	18.8	51.4	64.2	67.4	68.9	69.9	71.7	72.2		
OR >300	18.8	52.9	66.4	70.2	71.9	73.9	75.7	76.2		
OR >150	18.8	53.1	66.7	70.4	72.2	74.2	75.9	76.4		
OR >0	19.3	53.6	67.7	71.9	74.4	76.7	79.2	79.7		
TOTAL	77	214	270	287	297	306	316	318		

TOTAL NUMBER OF OBS: 399

PCT FREQ NH <5/8: 20.3

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

										TOTAL
										OBS
0	1	2	3	4	5	6	7	8		
1.6	.2	4.2	8.0	4.9	9.8	15.2	7.8	45.5	2.7	448

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.4	.2	.7	.2	.4	.4	.4	.4	.0	.0	.2	.0	.2	.0	.4	.4	.0	.0	22	3.9
NO PCP	.0	.0	.2	.2	.2	.0	.0	.2	.0	.0	.0	.2	.4	.0	.0	.0	.0	.0	7	1.2
TOTAL	2	1	5	2	3	2	2	3	0	0	1	1	3	0	2	2	0	0	29	5.1
PCP	.4	.4	.5	.7	.2	.7	.0	.0	.5	.2	.4	.2	.0	.0	.5	.4	.0	.0	28	4.9
NO PCP	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.2	.0	.0	3	.5
TOTAL	2	2	3	4	2	4	0	0	3	1	2	1	1	0	3	3	0	0	31	5.4
PCP	1.2	.9	1.1	.9	.9	.4	.5	.2	.2	.2	.5	.0	.2	.2	.5	.2	.0	.2	46	8.1
NO PCP	.4	.4	.5	.4	.2	.2	.2	.0	.0	.0	.2	.2	.0	.0	.2	.0	.0	.0	15	2.6
TOTAL	9	7	9	7	6	3	4	1	1	1	4	1	1	1	4	1	0	1	61	10.7
PCP	2.3	1.1	1.8	.0	.5	.9	.2	.5	.4	.2	.5	.4	.7	.0	.9	.4	.0	.0	60	10.5
NO PCP	.9	.2	1.1	.9	.7	.5	.4	.4	.2	.0	.2	.2	.2	.0	.0	.4	.0	.0	34	6.0
TOTAL	18	7	16	5	7	8	3	5	3	1	4	3	5	0	5	4	0	0	94	16.5
PCP	2.1	.5	.9	.2	.9	.2	.5	.0	.4	.0	.2	.5	.2	.5	.7	.5	.0	.0	47	8.2
NO PCP	3.3	.7	2.8	1.8	3.7	2.8	1.8	1.6	1.2	.9	1.2	2.1	1.4	1.4	.2	2.1	.0	.2	166	29.1
TOTAL	31	7	21	11	26	17	13	9	9	5	8	15	9	11	5	15	0	1	213	37.3
PCP	.0	.5	.2	.0	.4	.0	.2	.0	.2	.0	.0	.0	.4	.0	.0	.0	.0	.0	10	1.8
NO PCP	1.4	1.2	2.8	1.2	1.4	1.6	1.8	1.1	1.4	1.1	1.2	1.4	2.5	1.4	.9	.4	.0	.7	133	23.3
TOTAL	8	10	17	7	10	9	11	6	9	6	7	8	16	8	5	2	0	4	143	25.0
TOTAL PCT	70 12.3	34 6.0	71 12.4	36 6.3	54 9.5	43 7.5	33 5.8	24 4.2	25 4.4	14 2.5	26 4.6	29 5.1	35 6.1	20 3.5	24 4.2	27 4.7	0	6 1.1	571 100.0	

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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	4-10	.0	.0	.0	.1	.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	4	.5
	11-21	.0	.1	.2	.1	.1	.0	.1	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	7	.8
	22+	.2	.0	.3	.1	.2	.1	.0	.3	.0	.0	.1	.1	.2	.0	.1	.2	.0	.0	19	2.2
	TOTAL	2	1	5	3	3	2	2	3	0	0	1	1	3	0	2	2	0	0	30	3.4
1/2<1	0-3	.1	.1	.1	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.2	.0	.0	.1	7	.8
	4-10	.0	.0	.0	.1	.1	.0	.1	.0	.2	.0	.1	.0	.0	.0	.0	.0	.0	.0	6	.7
	11-21	.0	.0	.2	.0	.1	.0	.0	.0	.1	.0	.2	.0	.1	.0	.2	.1	.0	.0	10	1.1
	22+	.1	.1	.2	.3	.1	.5	.0	.0	.0	.1	.1	.0	.0	.0	.0	.2	.0	.0	17	1.9
	TOTAL	2	2	5	4	3	4	1	0	4	1	4	1	1	0	4	3	0	1	40	4.6
1<2	0-3	.1	.1	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	4	.5
	4-10	.1	.3	.1	.1	.1	.0	.1	.0	.1	.0	.5	.1	.3	.1	.2	.0	.0	.0	20	2.3
	11-21	.6	.1	.6	.2	.3	.2	.2	.1	.0	.1	.1	.0	.1	.0	.5	.1	.0	.0	29	3.3
	22+	.5	.5	.6	.5	.5	.2	.2	.1	.1	.0	.2	.1	.0	.1	.1	.0	.0	.0	32	3.7
	TOTAL	11	9	11	7	9	4	5	2	2	1	7	2	4	2	7	1	0	1	85	9.7
2<5	0-3	.0	.0	.1	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	6	.7
	4-10	.5	.2	.3	.1	.8	.1	.2	.0	.2	.1	.5	.1	.2	.0	.6	.2	.0	.0	37	4.2
	11-21	1.7	.5	.7	.3	.6	.5	.8	.1	.5	.0	.2	.0	.0	.0	.2	.2	.0	.0	60	6.9
	22+	1.0	.6	1.1	.5	.6	.9	.2	.5	.3	.3	.3	.1	.6	.0	.5	.2	.0	.0	68	7.8
	TOTAL	28	11	20	8	19	13	11	5	9	4	12	4	7	0	11	6	0	3	171	19.6
5<10	0-3	.6	.0	.1	.0	.0	.1	.1	.0	.2	.0	.2	.0	.1	.0	.1	.3	.0	.2	19	2.2
	4-10	.8	.2	.7	.1	.7	.2	.7	.0	.7	.2	.8	.3	.6	.2	.3	.9	.0	.0	66	7.6
	11-21	2.2	.2	1.6	.6	.8	1.1	1.1	.7	.8	.6	.6	.3	.6	.5	.8	1.0	.0	.0	118	13.5
	22+	1.4	.8	1.4	.8	2.5	.7	.6	.3	.5	.1	.6	1.1	.9	.7	.1	.1	.0	.0	110	12.6
	TOTAL	43	11	33	13	35	19	22	9	19	8	19	16	19	12	12	21	0	2	313	35.9
10+	0-3	.1	.0	.2	.0	.0	.0	.0	.0	.1	.0	.1	.0	.1	.2	.0	.0	.0	.5	12	1.4
	4-10	.9	.3	.9	.2	.2	.2	1.1	.2	.6	.5	1.0	.6	.9	.3	1.3	.1	.0	.0	83	9.5
	11-21	.5	.7	1.7	.2	.8	.6	.5	.5	.7	.5	.6	.1	1.6	.7	.5	.2	.0	.0	89	10.2
	22+	.3	.6	.2	.6	.5	.6	.5	.2	.2	.1	.5	.5	.6	.1	.1	.1	.0	.0	49	5.6
	TOTAL	16	14	27	9	13	12	18	8	14	9	19	10	28	12	16	4	0	4	233	26.7
	TOTAL	102	48	101	44	82	54	59	27	48	23	62	34	62	26	52	37	0	11	872	100.0
	PCT	11.7	5.5	11.6	5.0	9.4	6.2	6.8	3.1	5.5	2.6	7.1	3.9	7.1	3.0	6.0	4.2	.0	1.3	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8), AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL ANY HGT	NH <5/8 TOTAL OBS
00003	3.5	.0	3.5	7.0	27.0	21.7	10.4	1.7	2.6	.9	78.3	21.7 115
06009	3.0	.0	5.0	6.9	24.8	23.8	16.8	4.0	1.0	.0	65.1	14.9 101
12015	3.3	1.1	4.4	5.6	24.4	21.1	15.6	.0	.0	.0	75.6	24.4 90
18021	3.1	.0	3.1	7.1	23.5	26.5	8.2	2.0	3.1	.0	76.5	23.5 98
TOT	13	1	16	27	101	94	51	8	7	1	319	85 404
PCT	3.2	.2	4.0	6.7	25.0	23.3	12.6	2.0	1.7	.2	79.0	21.0 100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	6.1	1.8	4.4	13.2	38.6	36.0	114
06009	3.0	3.0	4.0	17.0	39.0	34.0	100
12015	5.6	1.1	2.2	19.1	40.4	31.5	89
18021	6.3	5.2	6.3	9.4	44.6	28.1	96
TOT	21	11	17	58	162	130	399
PCT	5.3	2.8	4.3	14.5	40.6	32.6	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET, NH >4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00003	3.5	11.4	35.1	43.9	21.1	114
06009	3.0	10.0	33.0	54.0	13.0	100
12015	3.4	13.5	36.0	41.6	22.5	89
18021	5.2	15.6	35.4	42.7	21.9	96
TOT	15	50	139	182	78	399
PCT	3.8	12.5	34.8	45.6	19.5	100.0

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TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP														TOTAL		PCT	
TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	DBS							FREQ	
45/49	.0	.0	.0	.0	.2	.2	.6	.0	5					5		1.0	
40/44	.0	.0	.0	.0	.4	1.8	3.7	3.5	64					64		12.5	
35/39	.0	.0	.0	.0	.6	2.0	7.0	14.5	222					222		43.4	
30/34	.0	.0	.0	.0	.0	1.0	3.7	9.6	170					170		33.3	
25/29	.0	.0	.0	.0	.0	.0	1.0	2.2	40					40		7.8	
20/24	.0	.0	.0	.0	.0	.0	.0	1.0	10					10		2.0	
TOTAL	0	0	0	0	6	25	82	157	511					511		100.0	
PCT	.0	.0	.0	.0	1.2	4.9	16.0	30.7									

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP														VAR		CALM	
TEMP F	N	NE	E	SE	S	SW	W	NW									
45/49	.0	.0	.0	.0	.4	.2	.2	.2						.0		.0	
40/44	1.0	1.2	.8	1.8	2.7	1.4	2.0	1.6						.0		.2	
35/39	4.3	6.7	9.2	4.7	4.7	5.9	3.7	3.7						.0		.6	
30/34	6.3	4.1	4.3	2.0	1.8	5.3	4.3	4.9						.0		.4	
25/29	3.3	1.6	.0	.2	.0	.2	.4	1.8						.0		.4	
20/24	.2	.2	.0	.0	.0	.0	.6	1.0						.0		.0	
TOTAL	77	70	73	44	49	66	57	67						0		8	
PCT	15.1	13.7	14.3	8.6	9.6	12.9	11.2	13.1						.0		1.6	

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR														TOTAL	
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	DBS						
00003	45	44	41	34	27	24	22	34.2	254					254	
06009	45	43	42	35	27	24	22	34.4	249					249	
12015	45	41	39	34	28	24	23	33.6	124					124	
18021	45	41	40	34	27	25	23	33.7	239					239	
TOT	45	43	41	34	27	24	22	34.1	866					866	

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR														MEAN		TOTAL	
HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100											
00003	.0	1.3	4.4	17.1	31.0	46.2								87		158	
06009	.0	1.8	8.0	13.5	28.8	47.9								86		163	
12015	.0	.0	.0	20.0	32.5	47.5								87		40	
18021	.0	.6	3.2	16.2	32.5	47.4								87		154	
TOT	0	6	25	82	159	243								87		515	

PERIOD: (PRIMARY) 1944-1970  
(OVER-ALL) 1909-1970

FEBRUARY

AREA 0010 ATTU  
51-55N 172-180E

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DI.	21	25	29	33	37	41	45	TOT	W	WD
	24	28	32	36	40	44	48		FOG	FOG
7/6	.0	.0	.0	.0	.0	.2	.0	1	.0	.2
6	.0	.0	.0	.0	.0	.2	.4	3	.0	.6
5	.0	.0	.0	.0	.0	.2	.0	1	.0	.2
4	.0	.0	.0	.0	.4	.4	.2	5	.0	1.0
3	.0	.0	.0	.0	.4	.4	.2	5	.0	1.0
2	.0	.0	.0	1.0	1.5	1.0	.0	17	.2	3.3
1	.0	.0	.0	.6	3.1	.0	.0	18	.0	3.8
0	.0	.0	.0	2.9	5.0	.0	.0	38	.0	7.9
-1	.0	.0	.0	2.9	2.1	.0	.0	24	.0	5.0
-2	.0	.0	.4	7.5	3.5	.0	.0	55	.2	11.3
-3	.0	.0	.8	8.4	1.0	.0	.0	49	.0	10.2
-4	.0	.0	2.3	10.2	.0	.0	.0	60	.2	12.3
-5	.0	.6	4.2	6.1	.0	.0	.0	52	.0	10.9
-6	.0	.8	6.7	1.0	.0	.0	.0	37	.2	7.5
-7/-8	.0	.0	8.1	1.3	.0	.0	.0	49	.0	10.2
-9/-10	.0	2.7	4.2	.0	.0	.0	.0	33	.0	6.9
-11/-13	.6	4.0	1.0	.0	.0	.0	.0	27	.0	5.6
-14/-16	.8	.2	.0	.0	.0	.0	.0	5	.2	.8
TOTAL	7	40	133	201	82	12	4	479	.5	474
PCT	1.5	8.4	27.8	42.0	17.1	2.5	.8	100.0	1.0	99.0

PERIOD: (PRIMARY)

(OVER-ALL) 1963-1970

FEBRUARY

TABLE 18

AREA 0010

51-55N

ATTU

172-180E

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N					NE					TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47			
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
1-2	.0	.0	.0	.0	.0	.0	1.0	.0	.0	.0	0	.0	2
3-4	.0	2.0	.0	.0	.0	.5	.0	1.5	.0	.0	4	.0	4
5-6	.0	.0	3.0	.5	.0	.0	.0	1.0	.0	.0	7	.0	2
7	.0	.0	.5	.0	.0	.0	.0	.5	1.0	.0	1	.0	3
8-9	.0	.0	.0	.0	.0	.0	.5	.0	.5	.0	0	.0	4
10-11	.0	.0	.0	2.5	.0	.0	.0	.0	1.5	.0	5	.0	3
12	.0	.0	.0	1.0	.0	.0	.0	.0	.5	.0	2	.0	1
13-16	.0	.0	.0	1.0	1.0	.0	.0	.0	2.5	.5	4	.0	6
17-19	.0	.0	.0	.0	.0	.0	.0	.0	4.0	2.0	1	.0	12
20-22	.0	.0	.0	.0	.5	.0	.0	.0	1.0	1.0	0	.0	4
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	0	.0	2
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	0	4	7	10	3	1	3	8	22	8	24	1	43
PCT	.0	2.0	3.5	5.0	1.5	.5	1.5	4.0	11.1	4.0	12.1	.5	21.6

HGT	E					SE					TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47			
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
1-2	.0	.0	.5	.0	.0	.0	.5	.0	.0	.0	1	.0	2
3-4	.0	.0	1.5	.0	.0	.0	1.0	2.0	.0	.0	3	.0	6
5-6	.5	.0	.0	.0	.0	.0	.0	.5	.5	.0	1	.0	2
7	.0	.0	.5	.0	.0	.0	.0	.5	1.0	.0	1	.0	3
8-9	.0	.0	.5	1.0	.5	.0	.0	.0	1.0	.0	4	.0	0
10-11	.0	.0	.5	4.0	1.0	.0	.0	.0	1.0	.0	11	.0	0
12	.0	.0	.0	1.5	.5	.0	.0	.0	1.0	1.0	4	.0	2
13-16	.0	.0	.0	.5	.0	.0	.0	.5	.5	.0	2	.0	3
17-19	.0	.0	.0	1.5	1.0	.0	.0	.5	1.0	.0	5	.0	2
20-22	.0	.0	.0	1.5	.5	.0	.0	.0	.5	.5	4	.0	2
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	1	0	7	20	7	0	3	9	9	3	36	0	24
PCT	.5	.0	3.5	10.1	3.5	.0	1.5	4.5	4.5	1.5	18.1	.0	12.1

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S										SW										TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
1-2	.0	.0	.0	.0	.0	.0	0	.0	1.0	.5	.0	.0	.0	3	.0	1.0	.5	.0	.0	.0	3
3-4	.0	1.0	.0	.0	.0	.0	2	.0	1.0	.0	.0	.0	.0	2	.0	1.0	.0	.0	.0	.0	2
5-6	.0	.5	.5	.0	.0	.0	2	.0	.0	.5	.0	.0	.0	1	.0	.0	.5	.0	.0	.0	1
7	.0	.0	.5	.0	.0	.0	1	.0	.0	1.0	.0	.0	.0	2	.0	.0	1.0	.0	.0	.0	2
8-9	.0	.0	.0	.0	.5	.0	1	.0	.0	.0	1.0	.5	.0	3	.0	.0	.0	.5	.0	.0	3
10-11	.0	.0	1.0	.0	.0	.0	2	.0	.0	.0	.5	.0	.0	1	.0	.0	.0	.5	.0	.0	1
12	.0	.0	1.0	.0	.0	.0	2	.0	.0	.0	.5	.5	.0	2	.0	.0	.0	.5	.5	.0	2
13-16	.0	.0	1.0	.0	.5	.0	3	.0	.0	.0	.0	1.0	.0	2	.0	.0	.0	.0	.0	.0	2
17-19	.0	.0	1.0	.0	.5	.0	3	.0	.0	.0	.0	.5	.0	1	.0	.0	.0	.5	.0	.0	1
20-22	.0	.0	.0	.5	.0	.0	1	.0	.0	.0	.0	.0	.0	3	.0	.0	.0	.0	.0	.0	3
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	1	.0	.0	.0	.0	.0	.0	1
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	0	3	10	1	3	0	17	0	4	4	4	9	0	21	0	4	4	4	9	0	21
PCT	.0	1.5	5.0	.5	1.5	.0	8.5	.0	2.0	2.0	2.0	4.5	.0	10.6	.0	2.0	2.0	2.0	4.5	.0	10.6

HGT	W										NW										TOTAL	GRAND TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	
<1	.0	.0	.0	.0	.0	.0	1	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	1
1-2	.0	.5	1.0	.0	.0	.0	2	.0	.5	.0	.0	.0	.0	1	.0	.5	.0	.0	.0	.0	1	11
3-4	.0	.5	1.5	.0	.0	.0	4	.0	.5	1.0	.5	.0	.0	4	.0	.5	.0	.5	.0	.0	4	29
5-6	.0	.0	.0	.5	.0	.0	1	.0	.0	.5	.5	.0	.0	2	.0	.0	.5	.0	.0	.0	2	18
7	.0	.0	1.0	.0	.0	.0	2	.0	.5	.5	.0	.0	.0	2	.0	.5	.0	.0	.0	.0	2	15
8-9	.0	.0	.0	.0	.0	.0	1	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	13
10-11	.0	.0	.0	1.0	.0	.0	2	.0	.0	.0	1.5	.0	.0	0	.0	.0	.0	.0	.0	.0	0	26
12	.0	.0	.5	1.5	.0	.0	2	.0	.0	.0	1.0	.0	.0	3	.0	.0	.0	.0	.0	.0	3	18
13-16	.0	.0	.0	1.0	.0	.0	5	.0	.0	.0	.0	.0	.0	2	.0	.0	.0	.0	.0	.0	2	27
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	23
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	15
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	3
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
TOTAL	0	2	8	7	3	0	20	.0	3	4	7	0	0	14	.0	1.5	2.0	3.5	0	.0	14	199
PCT	.0	1.0	4.0	3.5	1.5	.0	10.1	.0	1.5	2.0	3.5	.0	.0	7.0	.0	1.5	2.0	3.5	.0	.0	7.0	100.0



FEBRUARY

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1970

AREA 0010 ATTU  
51-55N 172-180E

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)							TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+		
<1	2.0	.5	.0	.0	.0	.0	.0	5
1-2	.0	3.0	2.5	.0	.0	.0	.0	11
3-4	.5	5.9	7.4	.5	.0	.0	.0	29
5-6	.5	.5	5.9	2.0	.0	.0	.0	18
7	.0	.5	4.9	2.0	.0	.0	.0	15
8-9	.0	.5	1.5	3.0	1.5	.0	.0	13
10-11	.0	.0	1.5	10.3	1.0	.0	.0	26
12	.0	.0	1.5	5.4	2.0	.0	.0	18
13-16	.0	.0	1.5	6.9	4.4	.5	.0	27
17-19	.0	.0	1.5	5.9	3.9	.0	.0	23
20-22	.0	.0	.0	3.4	3.9	.0	.0	15
23-25	.0	.0	.0	.0	1.0	.5	.0	3
26-32	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	6	22	57	80	36	2	.0	203
PCT	3.0	10.8	28.1	39.4	17.7	1.0	.0	100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+ TOTAL	MEAN HGT
<6	.0	1.5	6.7	2.9	.9	.3	2.0	.6	1.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	55
6-7	.0	.3	.3	2.9	3.5	2.9	4.7	2.3	3.5	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	71
8-9	.0	.0	1.7	.3	2.6	3.2	4.9	3.8	3.5	5.5	2.6	.0	.0	.0	.0	.0	.0	.0	.0	97
10-11	.0	.0	.0	.3	.6	.3	.9	.3	.9	2.9	2.0	.9	.0	.0	.0	.0	.0	.0	.0	31
12-13	.0	.0	.0	.3	.3	.0	.6	.6	.6	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	11
>13	.0	.0	.0	.0	.0	.3	.3	.0	.6	.0	1.7	.0	.0	.0	.0	.0	.0	.0	.0	10
INDET	18.9	.0	.0	.0	.0	.9	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	69
TOTAL	65	6	30	23	21	27	46	26	35	33	23	3	0	0	0	0	0	0	0	344
PCT	18.9	1.7	8.7	6.7	7.8	7.8	13.4	7.6	10.2	9.6	6.7	.9	.0	.0	.0	.0	.0	.0	.0	100.0

MARCH

PERIOD: (PRIMARY) 1944-1970  
(OVER-ALL) 1904-1970

AREA 0010 ATTU  
51-55N 172-180E

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE				HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW	OTHER FRZN PCPN						FOG	SMOKE	DUST	BLWG	SIG	
N	.3	.0	.0	.0	2.5	.1	.0	.0	2.9	21	.0	.7	.0	.0	.0	6.8	75
NNE	.0	.0	.3	.0	2.1	.0	.0	.0	2.4	17	.0	.0	.0	.0	.0	3.9	45
NE	.1	.0	.1	.0	3.1	.0	.0	.0	3.3	24	.0	.1	.0	.0	.0	4.7	59
ENE	.1	.0	.0	.0	2.2	.0	.0	.1	2.5	18	.0	.4	.0	.0	.0	1.8	34
E	.8	.0	.7	.0	1.8	.0	.0	.0	3.3	24	.0	.8	.1	.0	.0	5.6	71
ESE	1.0	.0	.0	.0	1.4	.0	.0	.0	2.1	15	.0	.4	.0	.0	.0	2.8	38
SE	1.5	.0	.7	.0	.8	.0	.0	.3	3.3	24	.0	.6	.1	.0	.0	2.5	47
SSE	.1	.0	.0	.0	1.0	.0	.0	.0	1.1	8	.0	.8	.0	.0	.0	2.2	30
S	.6	.0	.1	.0	.7	.0	.0	.0	1.4	10	.0	.6	.1	.0	.0	4.3	46
SSW	.3	.0	.0	.0	.1	.0	.0	.0	.4	3	.0	.0	.0	.0	.0	3.6	29
SW	.4	.0	.1	.0	1.1	.0	.0	.0	1.5	11	.0	.0	.0	.0	.0	3.9	39
WSW	.0	.0	.0	.0	1.1	.0	.0	.0	1.1	8	.0	.0	.0	.0	.0	3.8	35
W	.0	.0	.1	.0	1.5	.0	.0	.0	1.7	12	.0	.0	.0	.0	.0	5.4	51
WNW	.0	.3	.0	.0	1.1	.0	.0	.0	1.3	9	.0	.0	.0	.0	.0	1.7	21
NW	.1	.0	.0	.0	2.2	.1	.0	.0	2.4	17	.0	.1	.0	.0	.0	3.2	41
NNW	.0	.0	.0	.0	1.7	.0	.0	.0	1.7	12	.0	.3	.1	.0	.0	2.8	35
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
CALM	.1	.0	.1	.0	.1	.0	.0	.0	.4	3	.0	.1	.0	.0	.0	2.6	23
TOT OBS	40	2	17	0	177	2	3	.4	32.8	236	0	36	4	0	0	443	719
TOT PCT	5.6	.3	2.4	.0	24.6	.3	.4				.0	5.0	.6	.0	.0	61.6	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE				HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW	OTHER FRZN PCPN						FOG	SMOKE	DUST	BLWG	SIG	
00003	4.0	.0	1.0	.0	31.3	.5	.0	1.0	37.9	75	.0	6.1	1.0	.0	.0	55.1	198
06009	7.6	.5	3.0	.0	23.7	.0	.0	.0	33.3	66	.0	5.6	1.0	.0	.0	60.1	198
12015	2.0	.0	2.0	.0	18.3	.0	.0	.7	22.9	35	.0	4.6	.0	.0	.0	72.5	153
18021	7.2	.5	3.1	.0	22.2	.5	.0	.0	32.5	63	.0	3.6	.0	.0	.0	63.9	194
TOT	40	2	17	0	180	2	3	.4	32.2	239	0	37	4	0	0	463	743
PCT	5.4	.3	2.3	.0	24.2	.3	.4				.0	5.0	.5	.0	.0	62.3	100.0

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PERIOD: (PRIMARY) 1944-1970  
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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	48+	00	03	06	09				12	15	18	21				
N	.2	2.5	3.4	2.5	.7	.3	107	9.7	19.2	9.8	20.0	12.0	9.7	8.5	23.1	6.8	9.4				
NNE	.0	.8	2.5	1.7	1.0	.0	67	6.1	22.9	5.1	.0	7.6	5.8	6.5	.0	8.8	4.4				
NE	.3	1.4	2.9	2.4	.5	.4	86	7.8	20.8	8.2	.0	7.0	5.2	9.2	7.7	7.5	9.4				
ENE	.0	.5	1.5	1.8	.6	.1	51	4.6	23.3	4.4	.0	7.6	2.6	5.2	.0	2.0	6.3				
E	.4	3.5	4.9	3.5	.7	.0	144	13.0	17.8	16.5	20.0	9.5	20.8	8.5	.0	6.8	13.1				
ESE	.0	.6	1.4	2.1	.4	.0	49	4.4	22.0	3.8	.0	4.4	3.9	6.5	.0	4.8	4.4				
SE	.4	2.5	2.6	1.2	.4	.1	79	7.1	16.1	8.2	.0	4.4	5.2	5.2	15.4	6.1	11.9				
SSE	.0	1.1	1.1	.9	.3	.0	37	3.3	18.2	3.5	.0	5.1	3.2	3.3	.0	4.8	.6				
S	.4	2.4	2.2	.8	.3	.0	66	6.0	14.8	6.6	.0	6.3	4.5	3.9	7.7	9.5	4.4				
SSW	.0	1.3	1.5	.5	.0	.0	36	3.3	14.3	2.8	.0	4.4	1.9	5.2	7.7	2.7	2.5				
SW	.4	1.1	2.5	1.1	.2	.0	58	5.2	16.0	5.1	20.0	5.1	5.8	5.9	7.7	6.1	3.1				
WSW	.0	1.4	1.5	1.9	.5	.0	58	5.2	20.1	6.0	.0	5.1	4.5	5.2	7.7	4.8	5.0				
W	.5	1.9	3.3	1.3	.4	.4	84	7.6	18.0	8.5	.0	8.2	7.1	6.5	15.4	8.2	5.6				
WNW	.3	1.1	1.0	.6	.1	.0	34	3.1	14.7	1.6	20.0	1.9	4.5	4.6	7.7	2.7	3.8				
NW	.7	2.2	2.1	1.0	.4	.1	71	6.4	14.8	6.3	.0	3.8	7.8	5.2	.0	7.5	8.8				
NNW	.2	.9	2.3	.9	.3	.0	50	4.5	18.2	1.9	20.0	5.1	5.2	6.5	.0	5.4	5.6				
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0				
CALM	2.6	278	406	267	73	14	29	2.6	.0	1.6	.0	2.5	1.9	3.9	.0	5.4	1.9				
TOT OBS	68	25.1	36.7	24.1	6.6	1.3	1106	100.0	17.8	316	5	158	154	153	13	147	160				
TOT PCT	6.1							100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0				

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)					
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD	00	03	06	09	12	15	18	21
N	1.1	5.3	5.7	2.4	1.2	174	15.7	20.7	14.9	20.0	19.6	15.6	15.0	23.1	15.6	13.8
NE	1.2	3.8	3.5	3.0	.9	137	12.4	21.8	12.7	.0	14.6	7.8	14.4	7.7	9.5	15.6
E	2.1	5.4	6.6	2.9	.5	193	17.5	18.9	20.3	20.0	13.9	24.7	15.0	.0	11.6	17.5
SE	1.8	3.9	3.2	1.4	.3	116	10.5	16.7	11.7	.0	9.5	8.4	8.5	15.4	10.9	12.5
S	1.2	4.8	2.6	.5	.1	102	9.2	14.6	9.5	.0	10.8	6.5	9.2	15.4	12.2	6.9
SW	1.0	4.2	3.6	1.4	.4	116	10.5	18.0	11.1	20.0	10.1	10.4	11.1	15.4	10.9	8.1
W	1.6	4.6	2.7	1.2	.5	118	10.7	17.1	10.1	20.0	10.1	11.7	11.1	23.1	10.9	9.4
NW	1.6	4.5	3.7	.9	.2	121	10.9	16.2	8.2	20.0	8.9	13.0	11.8	.0	12.9	14.4
VAR	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	2.6	404	350	151	44	29	2.6	.0	1.6	.0	2.5	1.9	3.9	.0	5.4	1.9
TOT OBS	157	36.5	31.6	13.7	4.0	1106	100.0		316	5	158	154	153	13	147	160
TOT PCT	14.2								100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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PERIOD: (PRIMARY) 1944-1970  
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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	WIND SPEED (KNOTS)						PCT TOTAL	
	1-3	4-10	11-21	22-33	34-47	48+	MEAN	OBS
00003	3.4	26.8	36.4	25.9	5.0	.9	17.5	321
06009	4.5	22.4	38.1	23.1	7.7	1.9	18.3	312
12015	.6	22.3	38.0	24.7	9.6	1.2	19.3	166
18021	4.2	27.7	34.9	23.1	5.5	1.0	16.9	307
TOT	39	278	406	267	73	14	17.8	1106
PCT	3.5	25.1	36.7	24.1	6.6	1.3	100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

BY WIND DIRECTION

WIND DIR	PCT FREQ						TOTAL OBS	MEAN CLOUD COVER
	0-2	3-4	5-7	8-10	11-14	15-18		
N	.2	2.2	4.3	4.5	57	6.4	57	6.4
NNE	.0	1.0	1.6	3.4	30	6.7	30	6.7
NE	.0	.4	2.2	4.9	38	7.3	38	7.3
ENE	.0	.2	.6	3.4	21	7.6	21	7.6
E	.6	.2	3.4	6.3	53	7.0	53	7.0
ESE	.2	.4	1.2	3.0	24	6.9	24	6.9
SE	.0	.2	1.0	3.0	21	7.4	21	7.4
SSE	.2	.2	.8	3.2	22	7.2	22	7.2
S	1.0	.8	2.4	2.8	35	5.8	35	5.8
SSW	.4	1.0	2.6	.6	23	5.3	23	5.3
SW	.2	1.4	2.2	2.8	33	6.2	33	6.2
WSW	.2	.2	3.2	1.0	23	6.2	23	6.2
W	.2	1.2	4.3	2.6	42	6.1	42	6.1
WNW	.2	.2	.6	2.0	15	7.0	15	7.0
NW	.4	.8	2.8	1.2	26	5.6	26	5.6
NNW	.4	.8	2.6	1.4	26	5.8	26	5.8
VAR	.0	.0	.0	.0	0	.0	0	.0
CALM	.4	.2	.6	2.4	18	6.7	18	6.7
TOT OBS	23	57	183	244	507	6.5	507	6.5
TOT PCT	4.5	11.2	36.1	48.1	100.0		100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	PERCENTAGE FREQUENCY OF NH <5/8												TOTAL OBS					
	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	CLOUD COVER	000 149	150 299	300 599	600 999	1000 1999	2000 3499		3500 4999	5000 6499	6500 7999	8000+	ANY HGT
N	.2	2.2	4.3	4.5	57	6.4	.6	.0	.4	1.4	1.6	3.4	1.0	.0	.2	.0	2.8	57
NNE	.0	1.0	1.6	3.4	30	6.7	.0	.0	.2	.2	1.2	2.2	.6	.2	.4	.0	1.0	30
NE	.0	.4	2.2	4.9	38	7.3	.4	.0	.4	.8	2.4	1.8	.8	.0	.0	.0	1.0	38
ENE	.0	.2	.6	3.4	53	7.6	.6	.0	.0	.2	1.8	1.2	.0	.0	.0	.2	.2	21
E	.6	.2	3.4	6.3	53	7.0	1.2	.0	.0	.4	2.8	3.4	1.2	.0	.0	.0	1.6	53
ESE	.2	.4	1.2	3.0	24	6.9	.6	.0	.0	.4	1.2	1.2	.6	.0	.0	.0	.8	24
SE	.0	.2	1.0	3.0	21	7.4	1.0	.0	.0	.4	1.0	1.4	.0	.2	.0	.0	.2	21
SSE	1.2	.8	2.4	2.8	35	5.8	.8	.0	.0	.2	.8	.8	.2	.0	.0	.2	1.4	22
S	.4	1.0	2.6	.6	23	5.3	.4	.0	.0	.4	1.2	1.4	1.6	.0	.0	.2	1.8	35
SSW	.2	1.4	2.2	2.8	33	6.2	.2	.0	.0	.4	.6	2.2	.6	.0	.0	.0	1.6	23
SW	.2	.2	3.2	1.0	23	6.2	.0	.0	.0	.0	.2	1.4	1.8	.0	.0	.0	1.6	33
WSW	.2	1.2	4.3	2.6	42	6.1	.4	.0	.0	.2	1.6	2.0	2.0	.4	.0	.2	1.6	23
W	.2	.2	.6	2.0	15	7.0	.6	.0	.2	.6	.4	.4	.2	.2	.0	.0	.4	15
WNW	.2	.8	2.8	1.2	26	5.6	.2	.0	.0	.4	.8	.6	1.0	.6	.0	.0	1.6	26
NW	.4	.8	2.6	1.4	26	5.8	.4	.0	.4	.2	1.0	1.2	.6	.2	.0	.0	1.2	26
NNW	.0	.0	.0	.0	0		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
VAR	.4	.2	.6	2.4	18	6.7	.0	.0	.0	.0	2.6	.2	.0	.0	.0	.0	.8	18
CALM	.23	57	183	244	507	6.5	37	0	8	31	110	130	71	.0	9	.0	104	507
TOT OBS	4.5	11.2	36.1	48.1	100.0		7.3	.0	1.6	6.1	21.7	25.6	14.0	1.8	.6	.8	20.5	100.0

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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)									
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0		
= OR >6500	.2	1.2	1.4	1.4	1.6	1.6	1.6	1.6		
= OR >5000	1.0	2.9	3.1	3.1	3.3	3.3	3.3	3.3		
= OR >3500	8.0	16.0	16.6	17.0	17.2	17.2	17.2	17.2		
= OR >2000	15.0	35.7	39.2	41.5	43.1	43.1	43.5	43.5		
= OR >1000	20.9	46.0	56.9	62.8	64.3	64.5	65.1	65.1		
= OR >600	22.8	50.9	62.8	68.6	70.4	70.6	71.2	71.2		
= OR >300	22.8	51.1	63.7	70.0	71.9	72.1	72.7	72.7		
= OR >150	22.8	51.1	63.7	70.0	71.9	72.1	72.7	72.7		
= OR > 0	23.0	52.0	66.5	73.1	75.4	77.2	78.8	79.1		
TOTAL	118	267	341	375	387	396	404	406		

TOTAL NUMBER OF OBS: 513

PCT FREQ NH <5/8: 20.9

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

										TOTAL
										OBS
0	1	2	3	4	5	6	7			
2.0	.3	4.7	6.4	5.5	7.7	14.8	10.4	41.1	7.0	596

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TABLE 6

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALC	TOTAL	PCT
PCP	.4	.3	.6	.4	.6	.4	.0	.1	.1	.0	.1	.3	.0	.0	.1	.0	.0	.0	25	3.5
NO PCP	.1	.0	.0	.3	.4	.4	.4	.6	.1	.1	.0	.0	.0	.3	.0	.1	.0	.0	21	2.9
TOTAL	.4	.2	.4	.5	.7	.6	.3	.5	.2	.1	.1	.2	.0	.2	.1	.1	.0	.0	46	6.4
PCP	.4	.3	1.0	1.1	.1	.3	.0	.1	.1	.0	.0	.3	.4	.0	.0	.?	.0	.0	32	4.4
NO PCP	.0	.1	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	4	.6
TOTAL	.3	.3	.9	.8	.1	.2	.0	.1	.1	.0	.0	.2	.3	.0	.0	.3	.0	.0	36	5.0
PCP	.4	1.2	.8	.1	.6	.1	.7	.1	.4	.3	.0	.3	.4	.7	.6	.3	.0	.0	51	7.1
NO PCP	.4	.3	.4	.0	1.0	.1	.1	.0	.1	.1	.0	.1	.0	.0	.1	.1	.0	.6	26	3.6
TOTAL	.6	1.1	.9	.1	1.1	.2	.6	.1	.4	.3	.0	.3	.3	.5	.5	.3	.0	.4	77	10.7
PCP	1.1	.6	.4	.7	1.0	.6	1.1	.3	.6	.0	.3	.3	.4	.3	.6	.6	.0	.0	62	8.6
NO PCP	.8	.4	.8	.6	.7	.6	.1	.3	.8	.4	.3	.1	.7	.1	.3	.6	.0	1.1	63	8.7
TOTAL	1.4	.7	.9	.9	1.2	.8	.9	.4	1.0	.3	.4	.3	.8	.3	.6	.8	.0	.8	125	17.3
PCP	.6	.6	.4	.1	.7	.7	1.4	.4	.0	.1	.8	.0	.6	.3	1.0	.1	.0	.4	59	8.2
NO PCP	3.2	2.2	1.7	1.0	1.7	1.0	.8	.7	1.2	1.8	2.1	1.4	1.9	.7	1.2	1.1	.0	.4	174	4.1
TOTAL	27	20	15	8	17	12	16	8	9	14	21	10	18	7	16	9	.0	.6	233	32.3
PCP	.1	.1	.1	.3	.6	.0	.1	.0	.1	.0	.3	.1	.0	.1	.1	.4	.0	.0	19	2.6
NO PCP	2.8	.8	1.7	.4	2.5	1.1	1.5	1.4	2.5	1.1	1.5	2.1	2.8	.6	1.5	1.0	.0	.6	186	25.8
TOTAL	21	7	13	5	22	8	12	10	19	8	13	16	20	5	12	10	.0	.4	205	28.4
TOTAL	75	50	59	36	70	38	46	29	45	29	39	36	52	22	40	34	.0	22	722	100.0
PCT	10.4	6.9	8.2	5.0	9.7	5.3	6.4	4.0	6.2	4.0	5.4	5.0	7.2	3.0	5.5	4.7	.0	3.0	100.0	

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PERIOD: (PRIMARY) 1944-1970  
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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	4-10	.1	.0	.1	.2	.2	.1	.2	.3	.2	.0	.0	.1	.0	.0	.0	.0	.0	.0	15	1.4
	11-21	.3	.0	.0	.1	.1	.2	.1	.0	.0	.1	.1	.0	.0	.1	.0	.1	.0	.0	14	1.3
	22+	.0	.2	.3	.2	.4	.3	.0	.0	.0	.0	.0	.1	.0	.1	.1	.0	.0	.0	17	1.6
	TOTAL	4	2	4	5	7	6	3	5	2	1	1	2	0	2	1	1	0	0	46	4.2
1/2<1	0-3	.0	.0	.2	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	.3
	4-10	.0	.0	.0	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	.3
	11-21	.1	.3	.3	.4	.0	.2	.0	.1	.1	.0	.0	.0	.1	.0	.0	.3	.0	.0	19	1.7
	22+	.2	.0	.5	.2	.0	.1	.0	.0	.0	.0	.0	.2	.3	.1	.1	.1	.0	.0	19	1.7
	TOTAL	3	3	11	8	1	3	0	1	2	0	0	2	4	1	1	4	0	0	44	4.0
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.1	.0	.4	7	.6
	4-10	.0	.2	.0	.0	.3	.0	.0	.1	.1	.1	.0	.0	.0	.2	.1	.2	.0	.0	13	1.2
	11-21	.5	.7	.5	.2	.6	.0	.3	.0	.2	.2	.0	.5	.4	.0	.1	.3	.0	.0	44	4.0
	22+	.1	.5	.4	.2	.4	.5	.4	.1	.4	.0	.2	.1	.2	.2	.4	.0	.0	.0	44	4.0
	TOTAL	6	15	9	4	14	5	7	2	7	3	2	6	6	5	7	6	0	4	108	9.9
2<5	0-3	.0	.0	.0	.0	.0	.0	.2	.0	.2	.0	.0	.0	.0	.1	.1	.1	.0	.7	15	1.4
	4-10	.5	.1	.2	.1	.5	.0	.1	.2	.4	.3	.2	.2	.3	.2	.6	.1	.0	.0	42	3.8
	11-21	.4	.2	.4	.1	.5	.3	.8	.1	.4	.1	.2	.1	.4	.2	.1	.8	.0	.0	53	4.9
	22+	.9	1.1	.7	.7	.9	.5	.3	.5	.0	.1	.1	.3	.3	.3	.3	.2	.0	.0	78	7.1
	TOTAL	19	15	14	10	21	9	15	8	10	5	5	6	10	8	12	13	0	8	188	17.2
5<10	0-3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.4	.0	.3	.0	.0	.6	17	1.6
	4-10	1.2	.4	.4	.1	.5	.2	.7	.3	.7	.7	.5	.3	.7	.6	.8	.4	.0	.0	93	8.5
	11-21	1.1	1.1	.8	.4	1.3	.5	.8	.4	.6	.4	1.3	.9	1.1	.2	1.2	.3	.0	.0	135	12.4
	22+	1.6	.6	.7	.8	.9	.5	.8	.3	.9	.4	.5	.6	.7	.1	.5	.4	.0	.0	110	10.1
	TOTAL	44	23	21	14	30	14	26	10	19	16	27	20	32	10	31	11	0	7	355	32.5
10+	0-3	.1	.0	.1	.0	.4	.0	.2	.0	.1	.0	.2	.0	.1	.1	.3	.0	.0	.8	25	2.3
	4-10	.8	.2	.7	.0	1.8	.4	1.6	.3	1.0	.2	.5	.8	.9	.1	.6	.3	.0	.0	111	10.2
	11-21	1.2	.3	1.0	.5	2.6	.2	.5	.4	.9	.8	1.0	.1	1.4	.5	.7	.5	.0	.0	136	12.5
	22+	.6	.4	.6	.5	1.3	.5	.2	.3	.3	.0	.5	1.1	.5	.0	.0	.5	.0	.0	79	7.2
	TOTAL	30	9	27	10	66	12	26	10	25	11	23	22	32	7	18	14	0	9	351	32.1
	TOTAL	106	67	86	51	139	49	77	36	65	36	58	58	84	33	70	49	0	28	1092	100.0
	PCT	9.7	6.1	7.9	4.7	12.7	4.5	7.1	3.3	6.0	3.3	5.3	5.3	7.7	3.0	6.4	.5	.0	2.6	100.0	

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PERIOD: (PRIMARY) 1944-1970  
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH > 4/8), AND  
OCCURRENCE OF NH < 5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH < 5/8 ANY HGT	TOTAL OBS
00003	7.6	.0	1.5	4.5	18.2	31.1	14.4	1.5	.8	3.0	82.6	17.4	132
06009	5.3	.0	1.5	6.3	19.5	26.3	14.3	2.3	.0	.0	75.9	24.1	133
12015	11.8	.0	2.4	3.1	19.7	25.2	11.8	3.1	.8	.0	78.0	22.0	127
18021	6.6	.0	.7	8.8	27.2	19.9	13.2	.0	.7	.7	77.9	22.1	136
TOT	41	0	8	31	112	135	71	9	3	5	415	113	528
PCT	7.8	.0	1.5	5.9	21.2	25.6	13.4	1.7	.6	.9	78.6	21.4	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NH) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	5.5	2.3	6.3	11.7	34.4	39.8	128
06009	3.8	2.3	2.3	14.6	35.4	41.5	130
12015	5.0	2.5	14.9	18.2	33.9	25.6	121
18021	3.0	2.2	11.2	16.4	35.1	32.1	134
TOT	22	12	44	78	178	179	513
PCT	4.3	2.3	8.6	15.2	34.7	34.9	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NH) AND/OR  
CEILING HGT (FEET, NH > 4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH < 5/8 AND 5+	TOTAL OBS
00003	6.3	9.4	29.7	54.7	15.6	128
06009	4.6	10.0	30.0	47.7	22.3	130
12015	10.7	17.4	45.5	37.2	17.4	121
18021	6.0	9.0	41.0	4.0	14.9	134
TOT	35	58	187	236	90	513
PCT	6.8	11.3	36.5	46.0	17.5	100.0



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PERIOD: (PRIMARY) 1944-1970  
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TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
45/49	.0	.0	.0	.0	.0	.0	.7	.0	4	.7
40/44	.0	.0	.0	.2	1.1	3.0	4.8	8.0	96	17.0
35/39	.0	.0	.0	.4	1.6	6.0	12.9	22.1	243	43.0
30/34	.0	.0	.0	.0	1.4	3.7	10.1	16.6	180	31.9
25/29	.0	.0	.0	.0	.0	.2	1.9	4.8	39	6.9
20/24	.0	.0	.0	.0	.0	.0	.0	.5	3	.5
TOTAL	0	0	0	3	23	73	172	294	565	100.0
PCT	.0	.0	.0	.5	4.1	12.9	30.4	52.0		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
45/49	.0	.0	.4	.2	.0	.2	.0	.0	.0	.0
40/44	.0	1.4	6.2	4.1	2.5	1.2	1.2	.2	.0	.2
35/39	4.4	4.6	11.3	6.0	4.2	6.0	3.4	2.3	.0	.7
30/34	6.9	5.0	3.0	2.8	.5	1.9	3.2	8.0	.0	.5
25/29	2.7	1.1	.4	.0	.0	.0	.9	1.6	.0	.4
20/24	.2	.4	.0	.0	.0	.0	.0	.0	.0	.0
TOTAL	80	70	120	74	41	53	49	68	0	10
PCT	14.2	12.4	21.2	13.1	7.3	9.4	8.7	12.0	.0	1.8

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	45	44	43	36	27	25	23	35.4	316
06009	45	44	41	35	26	23	23	34.6	308
12015	42	40	39	34	27	23	23	33.3	166
18021	42	41	40	34	26	23	23	33.9	310
TOT	45	42	41	35	27	23	23	34.4	1100

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	.6	4.5	10.6	31.8	52.5	88	179
06009	.0	1.1	4.0	14.9	32.0	48.0	87	175
12015	.0	.0	10.3	17.2	31.0	41.4	85	29
18021	.0	.0	2.7	12.6	27.3	57.4	89	183
TOT	0	3	23	73	172	295	88	566

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	21	25	29	33	37	41	45	TOT	W FOG	WD FOG
	24	28	32	36	40	44	48			
9/10	.0	.0	.0	.0	.0	.2	.0	1	.0	.2
7/8	.0	.0	.0	.0	.2	.6	.4	6	.0	1.1
6	.0	.0	.0	.0	.9	.7	.0	9	.6	1.1
5	.0	.0	.0	.0	.2	1.5	.0	9	.0	1.7
4	.0	.0	.0	.2	1.7	.9	.0	15	.2	2.6
3	.0	.0	.0	.0	.9	.9	.0	10	.0	1.8
2	.0	.0	.0	.4	6.7	.2	.0	39	.6	6.7
1	.0	.0	.0	.6	5.0	.2	.0	31	.4	5.4
0	.0	.0	.4	3.1	8.5	.0	.0	65	1.5	10.5
-1	.0	.0	.0	2.8	2.8	.0	.0	30	.4	5.2
-2	.0	.0	.4	7.8	1.3	.0	.0	51	.7	8.7
-3	.0	.0	.4	6.3	.6	.0	.0	39	.2	7.0
-4	.0	.0	1.1	4.8	.7	.0	.0	36	.4	6.3
-5	.0	.4	2.8	4.1	.6	.0	.0	42	.4	7.4
-6	.0	.2	4.1	2.0	.0	.0	.0	34	.2	6.1
-7/-8	.0	3.0	7.2	1.3	.7	.0	.0	96	.4	11.8
-9/-10	.0	3.7	1.1	.0	.0	.0	.0	26	.2	4.6
-11/-13	.9	2.2	.6	.0	.0	.0	.0	20	.0	3.7
-14/-16	1.5	.2	.6	.0	.0	.0	.0	12	.0	2.2
TOTAL	13	52	100	180	166	28	2	541	32	509
PCT	2.4	9.6	18.5	33.3	30.7	5.2	.4	100.0	5.9	94.1

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT);

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
1-2	.0	1.1	.0	.0	.0	.0	2	.0	.0	.6	.0	.0	.0	1
3-4	.0	2.8	.6	.0	.0	.0	6	.0	1.1	.6	1.1	.0	.0	5
5-6	.0	.0	.0	.6	.0	.0	1	.0	.0	.0	.6	.0	.0	1
7	.0	.0	1.7	2.2	.0	.0	7	.0	.0	1.7	.0	.0	.0	3
8-9	.0	.0	2.8	.0	.0	.0	5	.0	.0	.0	.6	.0	.0	1
10-11	.0	.0	1.7	1.7	.6	.6	8	.0	.0	1.1	1.1	.0	.0	4
12	.0	.0	1.1	.0	.6	.0	3	.0	.0	.0	.0	.0	.0	0
13-16	.0	.0	.0	1.7	.6	.0	4	.0	.0	.0	.6	.6	.0	2
17-19	.0	.0	.0	.6	.0	.0	1	.0	.0	.0	1.1	.0	.0	3
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	2.2	.0	4
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	0	7	14	12	3	1	37	0	2	7	9	5	1	24
PCT	.0	3.9	7.8	6.7	1.7	.6	20.7	.0	1.1	3.9	5.0	2.8	.6	13.4

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.0	.6	.0	.0	.0	.0	1	.0	.6	.0	.0	.0	.0	1
1-2	.0	.0	.6	.0	.0	.0	1	.0	.0	1.1	.0	.0	.0	3
3-4	.0	1.1	1.1	.0	.0	.0	4	.0	2.8	1.1	.0	.0	.0	7
5-6	.0	.6	.6	2.2	.0	.0	6	.0	.0	.0	.0	.0	.0	0
7	.0	.0	.6	.0	.0	.0	1	.0	.0	1.1	1.1	.0	.0	4
8-9	.0	.0	.6	1.7	.0	.0	4	.0	.0	.0	.6	.0	.0	1
10-11	.0	.0	.0	1.7	.0	.0	3	.0	.0	.0	.6	.0	.0	1
12	.0	.0	.6	.6	.0	.0	2	.0	.0	.0	.0	.0	.0	0
13-16	.0	.0	.0	.0	.6	.0	1	.0	.0	.0	.0	.0	.0	0
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.6	.0	1	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	0	4	7	11	2	0	24	0	7	6	4	0	0	17
PCT	.0	2.2	3.9	6.1	1.1	.0	13.4	.0	3.9	3.4	2.2	.0	.0	9.5

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S										SW									
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+
<1	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0
1-2	.0	.6	.0	.0	.0	.0	1	.0	.0	.6	.0	.0	.0	1	.0	.0	.0	.0	.0	.0
3-4	.0	2.8	1.1	.0	.0	.0	7	.0	1.1	.0	.0	.0	.0	2	.0	.0	.0	.0	.0	.0
5-6	.0	.0	1.1	.6	.0	.0	3	.0	.6	1.1	.0	.0	.0	3	.0	.0	.0	.0	.0	.0
7	.0	.0	1.7	1.7	.0	.0	6	.0	2.2	1.6	.0	.0	.0	5	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.6	.0	.0	.0	1	.0	.0	1.1	.0	.0	.0	2	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.6	.0	.0	.0	1	.0	.0	.0	.6	.0	.0	1	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	0	.0	.6	1.7	1.1	.6	.0	7	.0	.0	.0	.6	.0	.0
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.6	.0	1	.0	.0	.0	1.1	.0	.0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	2	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0
TOTAL	.0	3.4	5.0	2.2	.0	.0	19	.0	8	5.0	2.2	4	.0	24	.0	4.5	9	2.2	1.7	.0
PCT	.0	.0	.0	.0	.0	.0	10.6	.0	.0	.0	.0	.0	.0	13.4	.0	.0	.0	.0	.0	.0

HGT	W										NW									
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+
<1	.0	.0	.0	.0	.0	.0	0	.6	.6	.0	.0	.0	.0	2	.0	1.1	.0	.0	.0	.0
1-2	.0	.6	.6	.0	.0	.0	2	.0	1.1	.0	.0	.0	.0	6	.0	.0	1.1	.0	.0	.0
3-4	.0	1.7	1.7	.0	.0	.0	6	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	3	.0	.0	.6	.0	.0	.0
7	.0	.0	1.7	.0	.0	.0	0	.0	.0	.6	.0	.0	.0	0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.6	.6	.0	.0	2	.0	.0	.0	1.1	.0	.0	1	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	1	.0	.0	.0	.6	.0	.0	4	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	1	.0	.0	.0	1.7	.0	.0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0
TOTAL	.0	2.2	4.5	3.9	.0	.0	19	.6	1.7	2.8	1.7	3	.0	15	.0	3	5	1.7	3	.0
PCT	.0	.0	.0	.0	.0	.0	10.6	.0	.0	.0	.0	.0	.0	8.4	.0	.0	.0	.0	.0	.0

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1970

MARCH

AREA 0010 ATTU  
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TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)								TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+			
<1	10.6	1.5	.0	.0	.0	.0			24
1-2	.0	3.5	3.0	.0	.0	.0			13
3-4	.0	12.1	6.5	1.0	.0	.0			39
5-6	.0	1.0	3.0	3.5	.0	.0			15
7	.0	2.0	8.5	4.5	.0	.0			30
8-9	.0	.0	5.0	2.5	.0	.0			15
10-11	.0	.0	3.5	6.5	.5	.5			22
12	.0	.0	1.5	1.0	.5	.0			6
13-16	.0	.5	1.5	5.5	2.0	.0			19
17-19	.0	.0	.0	2.0	.0	.5			5
20-22	.0	.0	.0	.5	5.0	.0			11
23-25	.0	.0	.0	.0	.0	.0			0
26-32	.0	.0	.0	.0	.0	.0			0
33-40	.0	.0	.0	.0	.0	.0			0
41-48	.0	.0	.0	.0	.0	.0			0
49-60	.0	.0	.0	.0	.0	.0			0
61-70	.0	.0	.0	.0	.0	.0			0
71-86	.0	.0	.0	.0	.0	.0			0
87+	.0	.0	.0	.0	.0	.0			0
TOTAL	21	41	65	54	16	2			199
PCT	10.6	20.6	32.7	27.1	8.0	1.0			100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT	
<6	.5	4.0	4.3	2.6	1.2	.9	.2	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	59	3
6-7	.0	.7	3.3	2.6	5.5	2.1	3.8	1.2	.9	.7	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	92	8
8-9	.0	2.4	3.6	2.6	4.0	2.6	3.1	.9	2.6	.7	1.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	103	8
10-11	.0	.0	.2	.0	.2	.0	.7	.7	.5	.5	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	13	11
12-13	.0	.0	.0	.0	.0	.2	.0	.5	.7	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	7	13
>13	.0	.0	.0	.0	.0	.5	.2	.0	.5	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	141	12
INDET	33.2	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	7	12
TOTAL	142	30	48	33	46	28	34	14	23	9	15	0	0	0	0	0	0	0	0	0	422	0
PCT	33.6	7.1	11.4	7.8	10.9	6.6	8.1	3.3	5.5	2.1	3.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	5

APRIL

PERIOD: (PRIMARY) 1944-1969  
(OVER-ALL) 1902-1969

AREA 0010 ATTU  
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TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE				HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				PCPN	FRZG	SNOW	OTHER					PCPN	FOG	SMOKE	DUST	NO SIG	
N	.0	.0	.0	.0	.0	1.2	.0	.0	1.2	10	.0	.2	.0	.0	.0	4.8	53
NNE	.1	.0	.0	.0	.0	.4	.0	.0	.4	4	.0	.1	.2	.0	.0	2.7	30
NE	.4	.0	.1	.0	.0	1.4	.0	.0	1.4	16	.0	.0	.0	.0	.0	2.0	33
ENE	.5	.0	.1	.0	.0	.1	.0	.0	.1	6	.0	.1	.0	.0	.0	2.5	28
E	.8	.4	.5	.0	.0	.8	.0	.0	.8	20	.0	1.1	.0	.0	.0	2.4	49
ESE	.2	.0	.4	.0	.0	1.1	.0	.0	1.4	12	.0	.8	.1	.0	.0	1.5	33
SE	.5	.0	.4	.0	.0	.2	.0	.0	1.1	9	.0	.4	.0	.0	.0	2.7	35
SSE	.6	.0	.4	.0	.0	.7	.0	.0	1.1	9	.0	.1	.0	.0	.0	1.8	25
S	.7	.1	1.1	.0	.0	.0	.0	.0	1.1	22	.0	.9	.0	.0	.0	4.5	69
SSW	.5	.0	.5	.0	.0	.4	.0	.0	2.6	10	.0	.5	.0	.0	.0	5.4	62
SW	.2	.0	.5	.0	.0	.2	.0	.0	1.2	8	.0	.7	.0	.0	.0	5.0	56
WSW	.5	.0	.2	.0	.0	.8	.0	.0	.9	11	.0	.1	.4	.0	.0	10.3	102
W	.0	.0	.2	.0	.0	1.4	.0	.0	1.7	14	.0	.6	.1	.0	.0	10.0	105
WNW	.1	.2	.1	.0	.0	1.3	.0	.0	1.5	13	.0	.0	.0	.0	.1	4.6	53
NW	.0	.0	.1	.0	.0	.8	.0	.0	.9	8	.0	.0	.0	.0	.0	4.6	47
NNW	.1	.0	.0	.0	.0	.8	.0	.0	.9	8	.0	.0	.1	.0	.0	3.3	37
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
CALM	.0	.0	.2	.0	.0	.2	.0	.0	.0	4	.0	.0	.0	.0	.0	3.2	31
TOT OBS	44	6	40	0	0	103	0	0	.5	184	1	.48	10	.0	1	604	848
TOT PCT	5.2	.7	4.7	.0	.0	12.1	.0	.0	21.7		.1	5.7	1.2	.0	.1	71.2	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE				HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				PCPN	FRZG	SNOW	OTHER					PCPN	FOG	SMOKE	DUST	NO SIG	
00003	7.1	.5	4.3	.0	.0	11.0	.0	.0	21.9	46	.0	7.6	.5	.0	.0	70.0	210
06009	4.9	.0	6.7	.0	.0	16.4	.0	.0	26.7	60	.0	3.1	1.8	.0	.0	68.4	225
12015	1.5	1.0	3.5	.0	.0	9.5	.0	.0	14.4	29	.0	3.5	1.5	.0	.0	80.6	201
18021	6.8	1.4	4.1	.0	.0	10.9	.0	.0	22.2	49	.5	8.1	1.4	.5	.5	67.4	221
TOT	44	6	40	0	0	103	0	0		184	1	.48	11	.0	1	612	857
PCT	5.1	.7	4.7	.0	.0	12.0	.0	.0	21.5		.1	5.6	1.3	.0	.1	71.4	100.0

APRIL

PERIOD: (PRIMARY) 1944-1969  
(OVER-ALL) 1902-1969

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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)					
	0-3	4-10	11-21	22-33	34-47	48+	TOTAL OBS	PCT FREQ	MEAN SPD		00	03	06	09	12	15
N	1.0	3.5	2.0	1.1	.1	.0	92	7.7	11.5		9.0	9.1	6.9	6.0	5.0	25.0
NNE	.1	.8	1.6	.8	.1	.0	40	3.4	16.6		2.9	9.1	3.7	2.3	4.0	.0
NE	1.2	2.5	1.6	.2	.1	.0	66	5.5	9.4		7.1	.0	2.7	12.0	2.0	.0
ENE	.3	1.1	.7	.8	.0	.0	34	2.9	14.3		3.2	9.1	3.7	2.3	1.0	18.8
E	.3	2.9	2.9	.4	.2	.0	79	6.6	12.7		7.4	.0	4.3	12.8	4.0	6.3
ESE	.1	1.4	1.1	.7	.1	.0	40	3.4	15.2		2.6	9.1	5.9	3.0	2.0	.0
SE	.7	1.7	1.6	1.1	.2	.1	63	5.3	15.0		7.7	9.1	3.2	6.8	5.5	.0
SSE	.0	.2	1.9	.8	.1	.0	35	2.9	19.1		2.2	.0	2.7	3.8	5.0	.0
S	.3	1.6	3.3	1.4	.8	.1	90	7.6	19.0		4.8	.0	6.4	5.3	10.6	18.8
SSW	.1	1.4	2.7	1.3	.6	.0	73	6.1	18.4		6.4	.0	7.4	1.5	8.0	.0
SW	.5	2.0	2.2	1.2	.7	.0	78	6.5	16.1		6.1	.0	6.9	6.0	6.5	.0
WSW	.0	2.3	3.4	3.5	.6	.0	116	9.7	19.7		9.3	9.1	10.6	6.0	13.6	6.3
W	.9	3.4	4.5	2.3	.8	.1	143	12.0	15.9		9.6	9.1	14.9	11.3	12.1	6.3
WNW	.2	1.4	2.2	1.3	.4	.1	66	5.5	18.3		7.4	18.2	4.3	2.3	7.5	6.3
NW	.8	2.5	2.3	1.2	.1	.0	82	6.9	13.5		6.4	18.2	6.4	9.8	3.5	12.5
NNW	.3	1.3	1.8	.8	.1	.0	52	4.4	14.8		3.5	.0	5.9	5.3	4.0	.0
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0		.0	.0	.0	.0	.0	.0
CALM	3.6	359	26	225	37	4	43	3.6	15.1		4.5	.0	4.3	3.8	5.5	.0
TOT OBS	121	30.1	35.7	18.9	4.8	.3	1192	100.0			312	11	188	133	199	16
TOT PCT	10.2										100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)					
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD			00	03	06	09	12	15
N	2.9	4.9	2.3	.9	.0	132	11.1	13.1			11.9	18.2	10.6	8.3	9.0	25.0
NE	3.2	3.2	1.6	.4	.0	100	8.4	11.0			10.3	9.1	6.4	14.3	3.0	18.8
E	2.0	5.5	1.6	.8	.1	119	10.0	13.6			9.9	9.1	10.1	15.8	6.0	6.3
SE	1.3	2.7	3.5	.7	.1	98	8.2	16.5			9.9	9.1	5.9	10.5	10.6	.0
S	2.0	4.5	4.8	1.7	.7	163	13.7	18.8			11.2	.0	13.8	6.8	18.6	18.8
SW	2.2	5.1	6.5	2.3	.2	194	16.3	18.2			15.4	9.1	17.6	12.0	20.1	6.3
W	3.2	7.0	5.0	1.9	.4	209	17.5	16.7			17.0	27.3	19.1	13.5	19.6	12.5
NW	2.3	4.8	3.4	.8	.0	134	11.2	14.0			9.9	18.2	12.2	15.0	7.5	12.5
VAR	.0	.0	.0	.0	.0	0	.0	.0			.0	.0	.0	.0	.0	.0
CALM	3.6	449	341	114	17	43	3.6	.0			4.5	.0	4.3	3.8	5.5	.0
TOT OBS	271	37.7	28.6	9.6	1.4	1192	15.1				312	11	188	133	199	16
TOT PCT	22.7										100.0	100.0	100.0	100.0	100.0	100.0

APRIL

PERIOD: (PRIMARY) 1944-1969  
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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	1-3	4-10	11-21	WIND SPEED (KNOTS)				CALM	MEAN	PCT		TOTAL OBS
				22-33	34-47	48+				FREQ		
00003	7.7	31.6	35.3	16.7	3.4	.9		4.3	14.1	100.0		323
06009	7.5	30.8	32.1	21.5	3.7	.3		4.0	15.0	100.0		321
12015	1.9	22.3	40.9	23.3	6.5	.0		5.1	17.1	100.0		215
18021	7.5	33.0	36.3	15.6	6.0	.0		1.5	14.9	100.0		333
TOT	78	359	426	225	57	4		43	15.1			1192
PCT	6.5	30.1	35.7	18.9	4.8	.3		3.6		100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION							TOTAL OBS	MEAN CLOUD COVER
	0-2	3-4	5-7	8 & OBS	CD	SD	CD		
N	.1	.1	1.9	4.5			7.2	46	
NNE	.1	.1	.7	2.3			7.1	23	
NE	.4	.0	.3	1.9			6.8	18	
ENE	.6	.0	.6	2.2			6.5	23	
E	.3	.4	.4	3.4			6.9	32	
ESE	.1	.0	.1	2.9			7.7	22	
SE	.1	.1	.9	3.4			7.3	32	
SSE	.1	.4	.3	2.3			7.0	22	
S	.1	.3	.9	6.2			7.5	52	
SSW	.1	.6	2.6	4.3			6.9	53	
SW	.1	.6	2.7	3.4			6.7	48	
WSW	.6	2.2	5.7	4.3			6.0	89	
W	.6	2.6	3.6	6.0			6.3	89	
WNW	.1	1.3	2.0	3.3			6.6	47	
NW	.3	1.0	2.0	2.4			6.1	40	
NNW	.3	.3	2.6	1.3			6.2	31	
VAR	.0	.0	.0	.0			.0	0	
CALM	.3	.3	.4	3.2			7.0	29	
TOT OBS	32	72	193	399			6.7	696	
TOT PCT	4.6	10.3	27.7	57.3				100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION													
WIND DIR	NH <5/8							ANY HGT					
	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8	ANY HGT	TOTAL
N	.1	.0	.0	.0	1.7	2.9	1.1	.0	.0	.0	.7	.7	46
NNE	.9	.0	.1	.3	.6	.6	.1	.0	.0	.0	.3	.4	23
NE	.0	.0	.1	.0	.6	.3	.6	.0	.0	.0	.0	.7	18
ENE	.1	.0	.0	.0	.3	1.7	.3	.1	.0	.0	.0	.7	23
E	1.4	.0	.0	.0	.9	.6	.6	.1	.1	.1	.1	.7	32
ESE	.1	.0	.3	.1	1.0	.6	.6	.0	.0	.0	.3	.1	22
SE	.4	.0	.0	.0	.7	1.0	1.3	.1	.0	.0	.1	.6	32
SSE	.6	.0	.3	.0	.6	.4	.7	.0	.0	.0	.0	.6	22
S	1.0	.0	.0	.3	1.7	2.7	.9	.1	.0	.0	.0	.7	52
SSW	.6	.0	.0	.0	1.6	2.2	1.6	.3	.0	.0	.0	1.3	53
SW	.4	.0	.1	.3	1.6	2.4	.3	.0	.1	.0	.0	1.6	48
WSW	.1	.0	.1	.6	1.9	2.6	3.3	.6	.0	.0	.0	3.6	89
W	.6	.0	.0	.7	2.2	2.7	2.3	.1	.0	.0	.1	4.0	89
WNW	.3	.1	.7	.1	.4	1.6	1.6	.1	.0	.0	.0	1.7	47
NW	.0	.0	.1	.1	1.6	1.0	1.1	.3	.0	.0	.0	1.4	40
NNW	.0	.0	.0	.0	.9	1.0	1.0	.4	.0	.0	.1	1.0	31
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.0	.0	.0	.0	1.9	.7	.1	.0	.1	.4	.9	.9	29
TOT OBS	47	1	14	23	139	174	122	17	3	11	145	696	
TOT PCT	6.8	.1	2.0	3.3	20.0	25.0	17.5	2.4	.4	1.6	20.8	100.0	



PERIOD: (PRIMARY) 1944-1969  
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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)									
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0		
= OR >6500	1.0	1.7	1.9	1.9	1.9	2.0	2.0	2.0		
= OR >5000	1.7	4.0	4.3	4.3	4.3	4.4	4.4	4.4		
= OR >3500	7.3	18.7	22.1	22.3	22.3	22.4	22.4	22.4		
= OR >2000	15.3	38.0	44.9	45.6	46.6	46.9	47.1	47.1		
= OR >1000	20.0	53.4	63.3	64.6	66.1	66.7	67.0	67.0		
= OR >600	22.0	55.9	66.0	67.4	69.4	70.0	70.3	70.3		
= OR >300	22.4	57.0	67.7	69.1	71.4	72.0	72.3	72.3		
= OR >150	22.4	57.0	67.7	69.1	71.6	72.1	72.4	72.4		
= OR >C	23.3	58.7	70.0	71.9	75.3	77.0	79.1	79.1		
TOTAL	163	411	490	503	527	539	554	554		

TOTAL NUMBER OF OBS: 700 PCT FREQ NH <5/8: 20.9

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

									TOTAL	
									OBS	
0	1	2	3	4	5	6	7	8		
2.0	1.1	5.2	6.7	5.1	6.7	13.9	7.9	44.9	6.4	746

APRIL

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.0	.0	.0	.1	.2	.4	.0	.0	.0	.1	.0	.1	.1	.0	.1	.0	.0	.1	11	1.3
ND PCP	.0	.1	.0	.1	.8	.1	.2	.0	.6	.4	.4	.0	.1	.0	.0	.0	.0	.0	24	2.8
TOTAL	0	1	0	2	9	4	2	0	5	4	3	1	2	0	1	0	0	1	35	4.1
PCP	.0	.0	.0	.0	.5	.6	.5	.4	.5	.0	.0	.0	.1	.1	.0	.1	.0	.1	24	2.8
ND PCP	.1	.1	.0	.0	.0	.5	.0	.0	.4	.1	.2	.0	.0	.0	.0	.0	.0	.0	12	1.4
TOTAL	1	1	0	0	4	9	4	3	7	1	2	0	1	1	0	1	0	1	36	4.2
PCP	.0	.0	.2	.1	.2	.0	.1	.2	.6	.1	.1	.1	.2	.1	.0	.0	.0	.0	19	2.2
ND PCP	.1	.1	.0	.0	.0	.2	.0	.0	.2	.0	.2	.2	.4	.0	.0	.0	.0	.0	13	1.5
TOTAL	1	1	2	1	2	2	1	2	7	1	3	3	5	1	0	0	0	0	32	3.8
PCP	.2	.4	.6	.1	1.2	.4	.1	.4	.9	.9	.2	.7	.6	.6	.1	.4	.0	.1	67	7.9
ND PCP	.4	.4	.0	.4	.4	.6	.6	.5	.4	.5	.7	.8	.5	.2	.2	.1	.0	.0	55	6.5
TOTAL	5	6	5	4	13	8	6	7	11	12	8	13	9	7	3	4	0	1	122	14.3
PCP	1.1	.1	1.1	.2	1.4	.1	.4	.1	.6	.0	.5	.2	.4	.6	.6	.2	.0	.1	55	6.5
ND PCP	2.8	1.2	1.5	.5	1.4	.7	1.2	.7	2.2	2.6	2.0	6.5	4.8	2.1	2.0	1.3	.0	1.9	301	35.3
TOTAL	33	11	22	6	14	7	13	7	24	22	21	57	44	23	22	13	0	17	356	41.8
PCP	.0	.0	.1	.1	.1	.0	.1	.0	.0	.0	.1	.1	.4	.2	.2	.2	.0	.1	16	1.9
ND PCP	1.6	1.2	.5	1.6	.8	.4	1.1	.7	1.6	2.5	2.1	3.1	4.8	2.3	2.3	2.0	.0	1.3	255	29.9
TOTAL	14	10	5	15	8	3	10	6	14	21	19	27	44	22	22	19	0	12	271	31.8
TOTAL	54	30	34	28	50	33	36	25	68	61	56	101	105	54	48	37	0	32	852	100.0
PCT	6.3	3.5	4.0	3.3	5.9	3.9	4.2	2.9	8.0	7.2	6.6	11.9	12.3	6.3	5.6	4.3	.0	3.8	100.0	

APRIL

PERIOD: (PRIMARY) 1944-1969  
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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.1	2	.2
	4-10	.3	.1	.0	.1	.5	.1	.2	.0	.2	.3	.2	.0	.1	.0	.0	.0	.0		23	1.9
	11-21	.0	.1	.0	.0	.3	.1	.0	.3	.3	.1	.1	.0	.0	.2	.2	.1	.0		19	1.6
	22+	.0	.0	.0	.1	.0	.2	.0	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0		5	.4
	TOTAL	4	2	0	2	9	4	2	4	6	4	3	1	2	2	2	1	0	1	49	4.1
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	1	.1
	4-10	.1	.0	.0	.0	.4	.3	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0		12	1.0
	11-21	.0	.0	.1	.0	.0	.1	.0	.2	.2	.0	.1	.0	.1	.1	.0	.1	.0		10	.8
	22+	.1	.1	.0	.0	.2	.3	.3	.1	.3	.1	.1	.0	.0	.1	.0	.0	.0		20	1.7
	TOTAL	2	1	1	0	7	9	4	3	8	1	2	0	1	2	0	1	0	1	43	3.6
1<2	0-3	.0	.0	.1	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	.3
	4-10	.0	.0	.1	.0	.1	.2	.0	.0	.2	.0	.0	.0	.2	.0	.0	.0	.0		8	.7
	11-21	.1	.1	.1	.0	.2	.1	.3	.0	.2	.1	.1	.2	.0	.0	.0	.0	.0		15	1.3
	22+	.0	.0	.0	.1	.1	.0	.0	.2	.3	.0	.2	.2	.3	.1	.0	.0	.0		15	1.3
	TOTAL	1	1	3	1	4	3	3	2	9	1	3	4	5	1	0	0	0	0	41	3.5
2<5	0-3	.1	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	3	.3
	4-10	.0	.1	.2	.2	.4	.5	.3	.0	.1	.2	.1	.1	.1	.0	.1	.0	.0		27	2.3
	11-21	.3	.0	.1	.0	.9	.3	.3	.5	.5	.5	.3	.3	.5	.2	.2	.3	.0		62	5.2
	22+	.3	.4	.2	.3	.2	.0	.1	.2	.8	.6	.5	.9	.4	.4	.1	.2	.0		65	5.5
	TOTAL	8	6	5	6	19	10	8	8	16	15	11	16	12	7	4	5	0	1	157	13.2
5<10	0-3	.3	.0	.3	.0	.1	.0	.4	.0	.0	.1	.4	.0	.4	.2	.2	.3	.0	2.0	54	4.5
	4-10	1.9	.3	1.6	.3	.9	.3	.5	.0	.7	.5	.7	.7	.9	.5	.8	.7	.0		132	11.1
	11-21	1.0	.8	.9	.3	1.2	.4	.7	.5	1.2	.8	1.2	2.2	1.8	.9	.8	.5	.0		180	15.2
	22+	.7	.3	.1	.1	.1	.2	.7	.2	.8	.9	.5	2.6	1.3	.6	.8	.3	.0		119	10.0
	TOTAL	46	16	34	8	27	10	27	8	31	28	33	65	53	26	29	25	0	24	485	40.9
10+	0-3	.7	.1	.8	.3	.1	.3	.3	.0	.1	.0	.1	.0	.5	.0	.6	.0	.0	1.3	58	4.9
	4-10	1.2	.3	.7	.6	.5	.1	.7	.2	.3	.5	1.1	1.4	2.2	.9	1.7	.7	.0		155	13.1
	11-21	.6	.7	.4	.3	.3	.1	.4	.4	.9	1.2	.4	.7	2.2	.8	1.3	.9	.0		139	11.7
	22+	.2	.1	.0	.3	.1	.1	.3	.3	.3	.3	.6	.3	.9	.6	.4	.5	.0		60	5.1
	TOTAL	31	14	23	17	12	4	19	10	19	23	26	29	69	28	47	25	0	16	412	34.7
	TOTAL	92	40	66	34	78	40	63	35	89	72	78	115	142	66	82	52	0	43	1187	100.0
	PCT	7.8	3.4	5.6	2.9	6.6	3.4	5.3	2.9	7.5	6.1	6.6	9.7	12.0	5.6	6.9	4.4	.0	3.6	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH > 4/8), AND OCCURRENCE OF NH < 5/8 BY HOUR														
HOUR (GMT)	000	150	300	600	1000	2000	3500	5000	8000+	TOTAL	NH < 5/8 ANY HGT	TOTAL	NH < 5/8 ANY HGT	TOTAL
	149	299	599	999	1999	3499	4999	6499	7999					
00003	4.0	.0	3.4	1.1	18.8	23.9	22.7	1.1	.0	2.3	77.3	22.7	176	
06009	3.3	.0	1.6	4.9	19.2	27.5	17.0	3.3	1.1	2.7	80.8	19.2	182	
12015	11.6	.6	.6	3.3	16.6	22.1	15.5	2.8	.6	.0	73.5	26.5	181	
18021	8.4	.0	2.4	3.6	24.6	25.1	16.2	2.4	.0	1.2	83.8	16.2	167	
TOT	48	1	14	23	139	174	126	17	3	11	556	150	706	
PCT	6.8	.1	2.0	3.3	19.7	24.6	17.8	2.4	.3	1.6	78.8	21.2	100.0	

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR									
HOUR (GMT)	< 1/2	1/2 < 1	1 < 2	2 < 5	5 < 10	10+	TOTAL OBS		
00003	3.5	5.2	1.7	9.2	40.5	39.9	173		
06009	2.7	1.1	2.2	11.5	43.4	39.0	182		
12015	4.5	3.9	1.7	13.5	46.1	30.3	178		
18021	4.8	4.2	1.8	15.0	41.9	32.3	167		
TOT	27	25	13	86	301	248	700		
PCT	3.9	3.6	1.9	12.3	43.0	35.4	100.0		

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR CEILING HGT (FEET, NH > 4/8), BY HOUR						
HOUR (GMT)	< 150 < 50YD	< 600 < 1	< 1000 < 5	1000+ AND 5+	NH < 5/8 AND 5+	TOTAL OBS
00003	4.6	11.6	22.0	57.2	20.8	173
06009	3.3	7.1	23.1	58.2	18.7	182
12015	11.2	15.7	31.5	44.9	23.6	178
18021	8.4	13.2	31.1	53.3	15.6	167
TOT	48	83	188	374	138	700
PCT	6.9	11.9	26.9	53.4	19.7	100.0

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TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP										TOTAL	PCT
TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	OBS	FREQ	
45/49	.0	.0	.2	.0	.4	2.1	.2	.6	18	3.5	
40/44	.0	.0	.0	.8	3.7	5.5	8.0	10.9	148	28.9	
35/39	.0	.0	.0	1.8	4.3	8.2	11.5	25.6	263	51.4	
30/34	.0	.0	.0	.0	.6	1.8	5.9	6.4	75	14.6	
25/29	.0	.0	.0	.0	.0	.6	.6	.4	8	1.6	
TOTAL	0	0	1	13	46	93	134	225	512	100.0	
PCT	.0	.0	.2	2.5	9.0	18.2	26.2	43.9			

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP												VAR	CALM
	N	NE	E	SE	S	SW	W	NW					
	.4	.4	.6	.2	.4	.8	.4	.2				.0	.2
3.1	3.1	7.2	5.1	3.9	3.3	2.7	4.1	1.8				.0	1.8
4.9	4.9	7.2	6.4	4.3	4.0	7.8	8.6	7.0				.0	.6
2.5	2.5	2.0	.8	.2	.0	.8	3.3	4.5				.0	.0
.4	.4	.2	.0	.0	.0	.0	.4	.6				.0	.0
.58	.58	.66	.66	.44	.45	.62	.86	.72				.0	.13
11.3	11.3	12.9	12.9	8.6	8.8	12.1	16.8	14.1				.0	2.5

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR											
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS		
00003	46	45	44	38	31	27	27	37.8			314
06009	46	45	44	37	31	28	27	37.2			311
12015	43	41	40	36	30	27	27	35.1			209
18021	46	45	42	36	30	27	27	36.2			327
TOT	46	45	43	37	30	28	27	36.7			1161

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR								TOTAL
HOUR (GMT)	0-29	30-59	60-69	70-79	80-89	90-100	MEAN	OBS
00003	.0	1.9	10.8	20.3	22.8	44.3	85	158
06009	.0	4.0	9.3	18.5	27.2	41.1	84	151
12015	.0	12.8	12.8	15.4	20.5	38.5	79	39
18021	.0	.0	6.0	16.8	29.9	47.3	87	167
TOT	0	14	46	94	135	226	85	515

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	25	29	33	37	41	45	TOT	W FOG	WD FOG
9/10	.0	.0	.0	.0	.0	.2	1	.0	.2
7/8	.0	.0	.0	.0	.5	.3	5	.0	.8
6	.0	.0	.0	.0	.3	.0	2	.2	.2
5	.0	.0	.0	.6	1.1	.3	13	.3	1.7
4	.0	.0	.0	1.7	2.2	.2	26	.3	3.8
3	.0	.0	.0	1.7	1.1	.0	18	.2	2.7
2	.0	.0	1.3	5.6	.8	.0	49	.6	7.0
1	.0	.0	.8	5.3	.6	.0	43	.6	6.1
0	.0	.2	4.2	11.3	.0	.0	100	1.6	14.1
-1	.0	.3	2.5	4.5	.3	.0	49	.5	7.2
-2	.0	.0	6.7	3.0	.0	.0	62	.3	9.4
-3	.0	.8	6.3	2.7	.0	.0	62	.5	9.2
-4	.0	.8	8.9	.3	.0	.0	64	.6	9.4
-5	.0	1.3	6.1	.2	.0	.0	48	.2	7.3
-6	.0	3.8	.3	.0	.0	.0	26	.0	4.1
-7/-8	.2	5.9	1.3	.2	.0	.0	48	.0	7.5
-9/-10	1.4	1.4	.0	.0	.0	.0	18	.0	2.8
-11/-13	.5	.3	.2	.0	.0	.0	6	.0	.9
TOTAL	13	94	246	237	44	6	640	37	603
PCT	2.0	14.7	38.4	37.0	6.9	.9	100.0	5.8	94.2

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N							NE							TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	
<1	.4	.0	.0	.0	.0	.0	1	.7	1.4	.0	.0	.0	.0	6	
1-2	.0	2.5	1.1	.0	.0	.0	10	.4	1.1	.7	.0	.0	.0	6	
3-4	.0	1.1	1.1	.0	.0	.0	6	.0	.0	.4	.0	.0	.0	1	
5-6	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
7	.0	.0	.4	1.1	.0	.0	4	.0	.0	.7	.0	.0	.0	2	
8-9	.0	.0	.0	.4	.0	.0	1	.0	.0	.4	.0	.0	.0	1	
10-11	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.4	.0	.0	1	
13-16	.0	.0	.0	.7	.0	.0	2	.0	.0	.0	.0	.0	.0	0	
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
TOTAL	1	10	7	6	0	0	24	3	7	6	1	0	0	17	
PCT	.4	3.6	2.5	2.1	.0	.0	8.5	1.1	2.5	2.1	.4	.0	.0	6.0	

HGT	E										SE				TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+		
<1	.0	.7	.0	.0	.0	.0	2	.4	.0	.0	.0	.0	.0	1	
1-2	.0	2.8	1.8	.0	.0	.0	13	.0	1.1	.7	.0	.0	.0	5	
3-4	.0	.7	2.8	.0	.0	.0	10	.0	1.1	2.1	.0	.0	.0	9	
5-6	.0	.0	.4	.4	.0	.0	2	.0	.0	.7	.4	.0	.0	3	
7	.0	.0	1.1	.0	.0	.0	3	.0	.0	.4	.0	.0	.0	1	
8-9	.0	.0	.0	.0	.0	.0	0	.0	.0	.4	.0	.0	.0	1	
10-11	.0	.0	.0	.4	.0	.0	1	.0	.0	.0	.4	.0	.0	1	
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
13-16	.0	.0	.0	1.1	.0	.0	3	.0	.0	.0	.7	.0	.0	2	
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
20-22	.0	.0	.0	.4	.0	.0	1	.0	.0	.0	.0	.4	.0	1	
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
TOTAL	0	12	17	6	0	0	35	1	6	12	4	1	0	24	
PCT	.0	4.3	6.0	2.1	.0	.0	12.5	.4	2.1	4.3	1.4	.4	.0	8.5	

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S										TOTAL	48+	SW				TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	1-3	4-10	11-21	22-33			34-47	48+			
<1	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0			
1-2	.0	1.1	1.8	.0	.0	.0	8	.0	2.1	.4	.0	.0	.0	7			
3-4	.0	.4	3.2	.7	.0	.0	12	.0	.0	2.8	.0	.0	.0	8			
5-6	.0	.0	1.4	.0	.4	.0	5	.0	.0	.4	.0	.0	.0	1			
7	.0	.0	.7	.0	.0	.0	2	.0	.0	.4	.0	.0	.0	1			
8-9	.0	.0	.4	.0	.4	.0	2	.0	.0	.0	.0	.0	.0	1			
10-11	.0	.0	.4	.4	1.4	.0	6	.0	.0	.4	1.1	.0	.0	4			
12	.0	.0	.7	.4	.0	.0	3	.0	.0	.0	1.4	.7	.0	6			
13-16	.0	.0	.0	.7	.4	.0	3	.0	.0	.0	1.8	.4	.0	6			
17-19	.0	.0	.0	1.4	.0	.0	4	.0	.0	.4	1.1	.4	.0	5			
20-22	.0	.0	.0	.4	.7	.0	4	.0	.0	.0	.4	1.1	.0	4			
23-25	.0	.0	.0	.0	.4	.0	1	.0	.0	.0	.0	.4	.0	1			
26-32	.0	.0	.0	.0	.4	.0	1	.0	.0	.0	.0	.0	.0	0			
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0			
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0			
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0			
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0			
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0			
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0			
TOTAL	0	4	24	11	11	1	51	0	6	13	16	8	0	43			
PCT	.0	1.4	8.5	3.9	3.9	.4	18.1	.0	2.1	4.6	5.7	2.8	.0	15.3			

HGT	W										TOTAL	48+	NW				TOTAL					
1-3	4-10	11-21	22-33	34-47	48+	1-3	4-10	11-21	22-33	34-47	48+											
<1	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
1-2	.4	2.1	.4	.0	.0	.0	8	.0	1.4	.7	.0	.0	.0	6								
3-4	.0	1.8	.4	1.1	.0	.0	9	.0	.7	.7	.0	.0	.0	4								
5-6	.0	.0	2.1	2.1	.0	.0	12	.0	.0	.0	.0	.0	.0	0								
7	.0	.0	2.5	2.1	.0	.0	13	.0	.0	1.1	.7	.0	.0	5								
8-9	.0	.0	.4	.7	.0	.0	2	.0	.0	.4	.7	.0	.0	3								
10-11	.0	.0	.4	1.4	.0	.0	5	.0	.0	2.1	1.1	.0	.0	9								
12	.0	.0	.4	.0	.4	.0	2	.0	.0	.0	.4	.0	.0	0								
13-16	.0	.0	.0	.0	.4	.0	1	.0	.0	.0	.4	.0	.0	2								
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
20-22	.0	.0	.0	.4	.0	.0	1	.0	.0	.0	.0	.0	.0	0								
23-25	.0	.0	.0	.4	.7	.4	4	.0	.0	.0	.0	.0	.0	0								
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
TOTAL	1	11	17	24	4	1	58	0	6	14	8	1	0	29								
PCT	.4	3.9	6.0	8.5	1.4	.4	20.6	.0	2.1	5.0	2.8	.4	.0	10.3								
GRAND TOTAL	10	63	59	23	31	10	26	11	20	9	11	3	5	0	0	0	0	0	0	0	281	100.0



PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1969

APRIL

AREA 0010 ATTU  
51-55N 172-180E

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	9.4	1.9	.0	.0	.0	.0					35
1-2	1.6	12.9	6.8	.0	.0	.0					66
3-4	.0	5.2	12.3	1.6	.0	.0					59
5-6	.0	.0	4.5	2.6	.3	.0					23
7	.0	.0	6.5	3.6	.0	.0					31
8-9	.0	.0	1.3	1.6	.3	.0					10
10-11	.0	.0	2.9	4.2	1.3	.0					26
12	.0	.0	1.0	1.6	1.0	.0					11
13-16	.0	.0	.0	5.2	1.3	.0					20
17-19	.0	.0	.3	2.3	.3	.0					9
20-22	.0	.0	.0	1.3	1.9	.3					11
23-25	.0	.0	.0	.3	.6	.0					3
26-32	.0	.0	.0	.3	1.0	.3					5
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	34	62	110	76	25	2					309
PCT	11.0	20.1	35.6	24.6	8.1	.6					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.5	7.4	7.4	3.6	1.3	.2	.7	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	119	3
6-7	.0	.4	.9	1.3	3.8	2.2	3.4	1.8	1.8	.4	.7	.0	.0	.0	.0	.0	.0	.0	.0	92	9
8-9	.0	.0	6.1	1.3	4.0	1.3	1.6	1.8	3.6	3.2	1.8	1.3	.5	.0	.0	.0	.0	.0	.0	147	10
10-11	.0	.0	.2	.2	.2	.4	1.4	.0	.0	.2	.5	.0	.5	.0	.0	.0	.0	.0	.0	20	13
12-13	.0	.0	.0	.2	.0	.0	.4	.2	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	6	12
>13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.2	.0	.2	.0	.0	.0	.0	.0	.0	3	23
INDET	30.2	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	169	0
TOTAL	171	43	82	36	51	22	42	21	32	22	20	7	7	0	0	0	0	0	0	556	5
PCT	30.8	7.7	14.7	6.5	9.2	4.0	7.6	3.8	5.8	4.0	3.6	1.3	1.3	.0	.0	.0	.0	.0	.0	100.0	

MAY

PERIOD: (PRIMARY) 1944-1969  
(OVER-ALL) 1909-1969

AREA 0010 ATTU  
51-55N 172-180E

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FOG PCPN	SMOKE	DUST	BLWG	SIG WEA	
N	.6	.0	.3	.0	.1	.1	.0	1.1	19	.0	.2	.0	.0	.0	5.9	126
NNE	.2	.1	.1	.0	.0	.0	.0	.4	7	.0	.2	.0	.0	.0	3.5	73
NE	.5	.1	.3	.0	.1	.0	.0	.9	16	.0	.4	.0	.0	.0	3.4	82
ENE	.3	.0	.1	.0	.1	.0	.0	.5	8	.0	.2	.3	.0	.0	1.7	45
E	1.0	.0	.4	.0	.1	.0	.1	1.5	26	.0	.5	.2	.0	.0	3.3	95
ESE	.5	.0	.6	.0	.1	.0	.0	1.2	21	.0	.4	.0	.0	.0	3.1	82
SE	1.1	.0	.6	.0	.0	.0	.1	1.7	29	.0	.5	.1	.0	.0	3.9	106
SSE	.9	.0	.6	.0	.0	.0	.0	1.4	25	.0	.2	.0	.0	.0	2.6	74
S	1.0	.2	1.8	.0	.1	.0	.0	3.0	53	.0	1.5	.1	.1	.0	5.8	182
SSW	.3	.0	.6	.0	.0	.0	.0	1.0	17	.0	1.3	.1	.0	.0	3.4	100
SW	.5	.1	.8	.0	.0	.0	.0	1.4	25	.0	1.1	.1	.0	.0	4.8	130
WSW	.1	.0	.2	.0	.1	.0	.0	.4	7	.0	.9	.1	.0	.0	5.5	119
W	.6	.0	.4	.0	.0	.0	.0	1.0	17	.0	.8	.1	.0	.0	7.4	162
WNW	.2	.1	.1	.0	.0	.0	.0	.4	7	.0	.2	.2	.1	.0	5.1	104
NW	.6	.2	.2	.0	.1	.1	.0	1.1	20	.0	.4	.0	.1	.1	4.9	114
NNW	.3	.0	.2	.0	.0	.0	.0	.5	9	.0	.1	.1	.0	.0	4.1	84
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
CALM	.1	.0	.4	.0	.0	.0	.0	.5	3	.0	.3	.0	.0	.0	3.4	73
TOT OBS	154	13	136	0	11	2	2	17.9	314	0	160	19	3	1255	1751	
TOT PCT	8.8	.7	7.8	.0	.6	.1	.1			.0	9.1	1.1	.2	71.7	100.0	

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FOG PCPN	SMOKE	DUST	BLWG	SIG WEA	
00003	8.8	.9	4.1	.0	.0	.2	.2	14.1	66	.0	10.0	.6	.2	75.0	468	
06009	7.8	.2	10.8	.0	.7	.2	.2	19.8	84	.0	7.8	2.4	.2	69.9	425	
12015	9.7	.7	9.0	.0	.5	.0	.0	19.6	81	.0	8.7	.2	.0	71.4	413	
18021	9.0	1.1	7.4	.0	1.3	.0	.0	18.3	84	.0	9.8	1.1	.2	70.5	458	
TOT	155	13	136	0	11	2	2	17.9	315	0	161	19	3	1266	1764	
PCT	8.8	.7	7.7	.0	.6	.1	.1			.0	9.1	1.1	.2	71.8	100.0	

MAY

PERIOD: (PRIMARY) 1944-1969  
(OVER-ALL) 1909-1969

AREA 0010 ATTU  
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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)					
	0-3	4-10	11-21	22-33	34-47	00	03	06	09	12					15	18	21			
N	.4	2.3	4.0	1.3	.1	.0	193	8.2	14.4	10.0	7.8	9.2	10.3	7.0	6.3	4.6	9.1			
NNE	.0	1.4	1.8	1.2	*	.0	106	4.5	16.1	4.8	8.6	2.3	4.0	4.7	4.5	4.3	5.4			
NE	.1	2.0	2.3	.6	.1	.0	121	5.1	13.9	5.4	6.0	3.7	5.8	4.9	5.4	4.6	6.6			
ENE	.2	.8	1.6	.6	.1	.0	74	3.1	15.5	3.0	4.3	2.0	6.3	2.6	3.6	1.6	4.5			
E	.3	2.7	2.1	1.2	.1	.0	151	6.4	13.9	5.6	7.8	3.2	12.1	4.9	7.1	4.6	12.0			
ESE	.3	1.8	1.6	.8	.4	.0	114	4.8	15.8	4.7	6.0	4.3	6.3	5.5	7.1	3.5	4.1			
SE	.3	1.4	2.6	1.7	.2	.0	144	6.1	16.8	6.1	4.3	6.6	4.9	6.8	8.9	4.6	7.4			
SSE	.1	.9	1.4	1.0	.3	.0	87	3.7	17.9	3.9	5.2	4.9	2.7	4.7	1.8	2.7	2.5			
S	.6	2.4	4.2	1.6	.3	.0	212	9.0	15.3	8.6	12.1	9.5	8.0	7.8	7.1	11.6	7.4			
SSW	.3	1.7	2.2	.9	*	.0	120	5.1	14.3	4.8	1.7	6.6	3.6	5.5	5.4	6.2	4.1			
SW	.6	2.3	3.1	1.1	.1	.0	171	7.3	13.7	8.1	6.0	7.5	6.3	8.1	8.0	7.0	5.4			
WSW	.2	1.5	3.1	.9	.3	.1	142	6.0	17.0	4.8	5.2	8.9	4.5	8.8	5.4	5.4	3.3			
W	.7	2.2	3.9	1.5	.6	*	209	8.9	16.2	9.3	6.9	9.2	9.8	7.3	6.3	12.2	6.2			
WNW	*	2.2	1.9	1.3	.1	.0	131	5.6	14.9	5.4	4.3	6.3	3.1	5.5	4.5	7.8	5.0			
NW	.2	2.3	3.5	.8	.1	.0	161	6.8	14.3	6.6	11.2	8.0	5.4	3.9	7.1	8.1	7.4			
NNW	.1	1.6	2.6	.6	.1	.0	118	5.0	14.7	3.9	1.7	4.6	4.0	6.8	8.0	5.9	5.0			
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0			
CALM	4.3	694	986	400	68	4	101	4.3	.0	4.8	.9	3.2	3.1	5.5	3.6	5.1	4.5			
TOT OBS	203	29.5	41.9	17.0	2.9	.2	2355	100.0	14.6	558	116	348	224	385	112	370	242			
TOT PCT	8.6							100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)					
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD	00	03	06	09	12	15	18	21
N	1.9	5.9	3.9	1.0	.0	299	12.7	15.0	14.9	16.4	11.5	14.3	11.7	10.7	8.9	14.5
NE	1.1	4.1	2.5	.6	.0	195	8.3	14.5	8.4	10.3	5.7	12.1	7.5	8.9	6.2	11.2
E	1.9	5.3	2.9	1.1	*	265	11.3	14.7	10.2	13.8	7.5	18.3	10.4	14.3	8.1	16.1
SE	1.4	3.2	4.0	1.1	*	231	9.8	17.2	10.0	9.5	11.5	7.6	11.4	10.7	7.3	9.9
S	2.3	6.2	4.6	.8	.1	332	14.1	14.9	13.4	13.8	16.1	11.6	13.2	12.5	17.8	11.6
SW	2.1	5.9	4.3	.7	.2	313	13.3	15.2	12.9	11.2	16.4	10.7	16.9	13.4	12.4	8.7
W	2.6	6.2	4.1	1.4	.1	340	14.4	15.7	14.7	11.2	15.5	12.9	12.7	10.7	20.0	11.2
NW	1.4	6.3	3.4	.7	.0	279	11.8	14.5	10.6	12.9	12.6	9.4	10.6	15.2	14.1	12.4
VAR	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	4.3	1016	702	173	13	101	4.3	.0	4.8	.9	3.2	3.1	5.5	3.6	5.1	4.5
TOT OBS	451	43.1	29.8	7.3	.6	2355	100.0	14.6	558	116	348	224	385	112	370	242
TOT PCT	19.2								100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

MAY

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	1-3	4-10	11-21	WIND SPEED (KNOTS)			CALM	MEAN	PCT		TOTAL OBS
				22-33	34-47	48+			FREQ	FREQ	
00003	3.9	30.6	43.0	15.4	2.7	.3	4.2	14.4	100.0		674
06009	4.9	29.9	40.4	18.5	3.0	.2	3.1	14.9	100.0		572
12015	3.2	27.2	42.9	17.7	3.8	.2	5.0	15.1	100.0		497
18021	5.2	29.7	41.2	16.7	2.3	.0	4.9	14.0	100.0		612
TOT	102	694	986	400	68	4	101	14.6			2355
PCT	4.3	29.5	41.9	17.0	2.9	.2	4.3		100.0		

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION								TOTAL OBS	MEAN CLOUD COVER
	0-2	3-4	5-7	8 &	OBSCD	8 &	OBSCD	8 &		
N	.4	.6	3.0	3.0	3.0	110			110	6.6
NNE	.1	.1	2.1	2.7	2.7	79			79	7.1
NE	.4	.2	1.8	2.3	2.3	75			75	6.6
ENE	.1	.3	.8	.9	.9	31			31	6.7
E	.8	.3	1.2	2.5	2.5	75			75	6.1
ESE	.1	.0	1.0	3.6	3.6	75			75	7.4
SE	.1	.1	.7	5.1	5.1	95			95	7.5
SSE	.0	.0	.6	3.5	3.5	64			64	7.8
S	.1	.1	1.6	8.5	8.5	162			162	7.7
SSW	.1	.1	1.2	4.6	4.6	96			96	7.4
SW	.4	.4	1.4	5.1	5.1	115			115	7.0
WSW	.4	.3	1.6	4.9	4.9	115			115	7.1
W	.9	.4	2.5	5.8	5.8	151			151	6.7
WNW	.6	.2	1.8	3.4	3.4	95			95	6.6
NW	.3	.4	2.0	3.4	3.4	97			97	6.8
NNW	.7	.2	1.1	2.8	2.8	76			76	6.5
VAR	.0	.0	.0	.0	.0	0			0	.0
CALM	.4	.1	.5	3.5	3.5	71			71	7.1
TOT OBS	95	57	392	1038	1582				1582	7.0
TOT PCT	6.0	3.6	24.8	65.6	100.0					

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

WIND DIR	AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION																TOTAL OBS	NH <5/8 ANY HGT	TOTAL DBS
	000	149	150	299	300	599	600	999	1000	1999	2000	3499	3500	4999	5000	6499	6500		
N	.3	.1	.1	.3	.3	.6	.6	.6	1.5	1.9	.8	.2	.1	.1	.1	.1	.1	1.3	110
NNE	.4	.0	.0	.1	.1	.2	.2	.2	1.3	2.1	.2	.1	.1	.1	.1	.1	.1	.4	79
NE	.4	.0	.0	.2	.2	.3	.3	.3	1.2	.8	.6	.3	.0	.0	.0	.0	.0	.9	75
ENE	.1	.0	.0	.1	.1	.1	.1	.1	.5	.3	.2	.0	.0	.0	.0	.0	.0	.5	31
E	.5	.1	.1	.3	.3	.3	.3	.3	.8	1.3	.1	.0	.0	.0	.0	.0	.0	1.5	75
ESE	.7	.0	.0	.2	.2	.5	.5	.5	1.2	1.2	.3	.1	.1	.1	.1	.1	.1	.4	75
SE	.4	.1	.1	.3	.3	.8	.8	.8	1.5	2.0	.6	.0	.0	.0	.0	.0	.0	.2	95
SSE	.4	.1	.1	.3	.3	.4	.4	.4	.9	.7	.6	.1	.0	.0	.0	.0	.0	.3	64
S	2.1	.0	.0	.1	.1	.7	.7	.7	3.6	1.8	.7	.1	.1	.1	.1	.1	.1	.7	.42
SSW	1.3	.3	.3	.1	.1	.6	.6	.6	2.1	.6	.3	.2	.1	.1	.1	.1	.1	.6	96
SW	1.1	.0	.0	.3	.3	.8	.8	.8	1.9	1.2	.7	.1	.0	.0	.0	.0	.0	1.2	115
WSW	1.1	.1	.1	.2	.2	.4	.4	.4	1.9	1.2	.6	.4	.1	.1	.1	.1	.1	1.1	115
W	.9	.0	.0	.3	.3	.0	.0	.0	3.4	2.1	.6	.0	.1	.1	.1	.1	.1	1.9	151
WNW	.4	.1	.1	.0	.0	.3	.3	.3	1.3	1.6	.7	.1	.0	.0	.0	.0	.0	1.5	95
NW	.4	.1	.1	.3	.3	.6	.6	.6	1.6	1.4	.6	.1	.1	.1	.1	.1	.1	1.0	97
NNW	.4	.0	.0	.4	.4	.2	.2	.2	.9	.6	.6	.1	.0	.0	.0	.0	.0	1.3	76
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.2	.1	.1	.1	.1	.2	.2	.2	2.1	.8	.1	.0	.0	.0	.0	.0	.0	.6	71
TOT OBS	176	14	14	57	108	27.8	27.8	27.8	440	346	130	28	.8	.5	.5	.5	.5	245	1582
TOT PCT	11.1	.9	.9	3.6	6.8	1.8	1.8	1.8	21.9	8.2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	15.5	100.0

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TABLE 7						
CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)						
CEILING (FEET)	= OR >10	= OR >5	= OR >2	VSBY (NM)		
				= OR >1	= OR >1/2	
				= OR >1/4	= OR >50YD	
					= OR >0	
= OR >6500	.8	2.3	2.4	2.4	2.5	2.5
= OR >5000	1.6	4.0	4.2	4.2	4.2	4.2
= OR >3500	4.9	11.7	12.2	12.4	12.5	12.5
= OR >2000	15.5	30.2	32.9	33.9	34.1	34.4
= OR >1000	24.7	52.4	58.8	61.3	61.7	62.1
= OR >600	27.1	57.7	64.9	67.8	68.5	69.0
= OR >300	27.7	59.9	67.5	70.9	71.7	72.6
= OR >150	27.8	60.1	67.9	71.5	72.4	73.4
= OR > 0	29.0	63.3	72.5	77.4	79.5	84.2
TOTAL	460	1003	1149	1227	1260	1335
TOTAL NUMBER OF OBS:		1585	PCT FREQ NH <5/8:		15.5	

TABLE 7A									
PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)									
0	1	2	3	4	5	6	7	8	TOTAL
3.4	2.2	3.6	2.3	3.5	4.6	10.3	12.7	48.5	1891
									DBS

MAY

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.1	.0	.0	.0	.0	.0	.1	.2	.3	.1	.3	.0	.0	.0	.0	.1	.0	.0	17	1.0
NO PCP	.2	.2	.0	.1	.1	.2	.1	.2	.6	.8	.5	.4	.2	.1	.2	.0	.0	.1	66	3.8
TOTAL	4	3	0	1	2	3	2	3	16	15	14	7	4	1	3	1	0	1	83	4.7
PCP	.1	.0	.1	.1	.0	.3	.1	.1	.1	.1	.1	.1	.1	.0	.0	.0	.0	.0	21	1.2
NO PCP	.1	.2	.2	.1	.1	.1	.1	.1	.3	.1	.1	.2	.2	.1	.0	.2	.0	.0	33	1.9
TOTAL	4	0	5	2	2	7	4	3	8	2	3	4	5	2	0	3	0	0	54	3.1
PCP	.1	.1	.1	.1	.1	.4	.3	.5	.7	.3	.3	.0	.1	.0	.3	.0	.0	.2	61	3.5
NO PCP	.2	.1	.1	.0	.1	.2	.1	.2	.6	.2	.2	.1	.2	.1	.1	.2	.0	.1	45	2.6
TOTAL	5	3	2	1	4	11	7	11	22	10	9	2	4	2	6	3	0	4	106	6.1
PCP	.3	.1	.2	.2	.5	.2	.6	.3	.9	.5	.5	.1	.3	.2	.1	.2	.0	.2	95	5.4
NO PCP	.3	.2	.1	.2	.3	.2	.3	.3	.9	.6	.9	.7	.0	.4	.5	.1	.0	.1	127	7.3
TOTAL	12	5	5	8	15	8	15	10	31	19	24	15	22	11	11	5	0	6	222	12.7
PCP	.3	.2	.4	.1	.7	.2	.6	.3	.9	.1	.2	.2	.3	.2	.6	.2	.0	.1	98	5.6
NO PCP	2.0	1.3	1.1	.7	1.0	1.1	1.9	1.2	3.3	1.3	1.8	2.9	3.5	1.9	1.8	1.1	.0	2.8	539	30.8
TOTAL	41	25	27	15	30	24	43	27	-2	24	35	53	68	37	42	24	0	50	637	36.4
PCP	.1	.1	.1	.0	.2	.0	.0	.1	.2	.0	.2	.1	.2	.0	.1	.1	.0	.0	22	1.3
NO PCP	3.3	2.1	2.3	1.0	2.3	1.7	2.0	.9	1.7	1.7	2.4	2.1	3.1	2.9	2.9	2.7	.0	.6	624	35.7
TOTAL	60	37	42	18	43	29	35	17	33	30	45	38	57	51	52	48	0	11	646	37.0
TOTAL PCT	126 7.2	73 4.2	81 4.6	45 2.6	96 5.5	82 4.7	106 6.1	74 4.2	182 10.4	100 5.7	130 7.4	119 6.8	160 9.2	104 5.9	114 6.5	84 4.8	0	72 4.1	1748 100.0	

MAY

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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	*	.0	.0	.0	*	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	*	5	.2
	4-10	.0	.1	.0	*	*	.1	*	.2	*	.2	.3	.0	.1	.0	*	.0	.0	.0	24	1.0
	11-21	.1	.0	.0	.0	*	.0	*	.1	.3	.4	.3	.2	.1	*	*	*	.0	.0	42	1.8
	22+	.0	.0	.0	.0	.0	*	.0	.1	.3	.1	.0	.0	*	.0	*	*	.0	.0	16	.7
	TOTAL	4	3	0	1	3	3	2	6	16	15	14	7	5	1	3	2	0	1	87	3.7
1/2<1	0-3	.0	.0	.0	.0	.0	.0	*	.0	.0	.0	.0	.0	*	.0	.0	.0	.0	.0	2	.1
	4-10	.1	.0	.0	.0	.0	.1	.0	*	.0	*	*	*	.1	*	.0	.0	.0	.0	12	.5
	11-21	.0	.0	.1	.0	.0	.1	.1	*	.3	.1	.1	.1	*	.0	.0	.1	.0	.0	18	.8
	22+	.1	.0	.1	.1	.1	.3	*	*	.0	.0	.0	.0	*	.2	.0	.0	.0	.0	25	1.1
	TOTAL	4	0	5	2	2	9	4	3	8	2	4	4	5	2	0	3	0	0	57	2.4
1<2	0-3	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	*	.0	.0	.2	8	.3
	4-10	.1	.0	.1	.0	.1	.1	.2	.1	.1	.0	.2	*	*	.0	.1	.1	.0	.0	27	1.1
	11-21	.1	.1	.0	*	.1	.1	.2	.1	.4	.3	.1	*	.2	.1	.1	.1	.0	.0	52	2.2
	22+	.1	*	.0	.0	.1	.3	*	.3	.5	.2	.2	.1	*	.0	.0	.0	.0	.0	43	1.8
	TOTAL	9	4	3	1	6	13	9	11	23	12	12	4	6	2	6	4	0	5	130	5.5
2<5	0-3	.0	.0	.0	.0	.0	.1	.0	.0	*	.1	.1	.0	*	.0	.0	.0	.0	.4	18	.8
	4-10	.3	.1	.1	.0	.3	.0	.1	.3	.4	.3	.3	*	.2	.1	.2	.0	.0	.0	57	2.4
	11-21	.3	.2	.1	.2	.3	.2	.3	.2	.7	.3	.5	.4	.6	.3	.3	.1	.0	.0	111	4.7
	22+	.1	.1	.1	.2	.3	.1	.3	.2	.3	.3	.3	.4	.6	.1	*	.1	.0	.0	81	3.4
	TOTAL	14	9	8	9	23	9	17	10	35	20	26	19	32	11	11	5	0	9	267	11.4
5<10	0-3	.1	.0	.1	.1	.2	.0	.1	.0	.3	.0	.3	*	.2	*	*	.0	.0	2.3	88	3.7
	4-10	.7	.5	.8	.2	1.0	.8	.4	.2	1.2	.6	.8	.9	1.0	1.1	.8	.6	.0	.0	273	11.6
	11-21	1.7	.7	1.0	.8	.8	.5	1.0	.8	1.8	.5	1.1	1.1	1.7	.6	1.4	1.1	.0	.0	387	16.5
	22+	.6	.5	.2	.3	.5	.3	1.1	.6	.3	.2	.3	.5	.8	.5	.5	.2	.0	.0	171	7.3
	TOTAL	72	40	48	33	57	37	59	37	85	31	58	60	85	53	64	45	0	55	919	39.1
10+	0-3	.3	.0	.0	*	.1	.1	.1	.1	.3	.2	.2	.1	.4	.0	.1	.1	.0	1.3	81	3.4
	4-10	1.2	.7	1.0	.6	1.2	.8	.7	.5	.6	.6	.8	.4	.8	.9	1.1	.9	.0	.0	300	12.8
	11-21	1.8	.8	1.1	.6	.9	.7	1.1	.1	.8	1.3	1.0	1.3	1.2	.9	1.7	1.2	.0	.0	373	15.9
	22+	.5	.6	.3	*	.4	.3	.3	.2	.2	.1	.4	.3	.7	.9	.3	.3	.0	.0	134	5.7
	TOTAL	89	50	56	28	60	43	53	20	45	38	56	48	74	62	77	59	0	30	888	37.8
	TOTAL	192	106	120	74	151	114	144	87	212	119	170	142	207	131	161	118	0	100	2348	100.0
	PCT	8.2	4.5	5.1	3.2	6.4	4.9	6.1	3.7	9.0	5.1	7.2	6.0	8.8	5.6	6.9	5.0	.0	4.3	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH > 4/8), AND  
OCCURRENCE OF NH < 5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH < 5/8 ANY HGT	TOTAL OBS
00003	8.9	.5	3.0	6.2	2.5	21.3	8.9	1.1	.7	2.1	79.2	20.8	437
06009	8.7	.5	3.9	8.1	2	10.5	10.2	1.0	1.0	2.4	81.9	18.1	381
12015	16.7	.5	3.2	7.2	26	10.4	4.7	.5	.2	2.0	82.0	18.0	401
18021	9.5	2.0	3.9	5.1	30.0	22.9	8.3	4.1	.0	1.2	87.1	12.9	410
TOT	178	14	57	108	442	347	131	28	8	31	1344	285	1629
PCT	10.9	.9	3.5	6.6	27.1	21.3	8.0	1.7	.5	1.9	82.5	17.5	100.0

TABLE 11

PERCENT FREQUENCY VS8Y (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	5.2	2.1	4.0	9.5	37.9	41.2	420
06009	4.2	2.4	5.6	8.8	34.5	44.6	377
12015	6.5	3.4	4.9	11.1	41.3	32.8	387
18021	4.5	1.5	5.7	10.5	41.9	35.9	401
TOT	81	37	80	158	617	612	1585
PCT	5.1	2.3	5.0	10.0	38.9	38.6	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VS8Y (NM) AND/OR  
CEILING HGT (FEET, NH > 4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH < 5/8 AND 5+	TOTAL OBS
00003	9.0	14.5	29.8	54.3	16.0	420
06009	8.8	13.8	31.3	52.5	16.2	377
12015	17.1	23.5	40.3	45.5	14.2	387
18021	9.7	16.5	32.2	57.1	10.7	401
TOT	176	270	528	831	226	1585
PCT	11.1	17.0	33.3	52.4	14.3	100.0



MAY

PERIOD: (PRIMARY) 1944-1969  
(OVER-ALL) 1909-1969

AREA 0010 ATTU  
51-55N 172-180E

TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
50/54	.0	.1	.0	.0	.4	.4	.3	.0	15	1.2
45/49	.0	.0	.1	.3	.7	3.3	2.6	1.5	104	8.5
40/44	.0	.0	.1	.4	2.0	6.7	15.9	26.0	626	51.1
35/39	.0	.0	.0	.2	1.1	6.2	11.6	19.4	472	38.6
30/34	.0	.0	.0	.0	.0	.1	.3	.2	7	.6
TOTAL	0	1	2	12	51	205	377	576	1224	100.0
PCT	.0	.1	.2	1.0	4.2	16.7	30.8	47.1		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
50/54	.1	.0	.2	.2	.3	.2	.0	.1	.0	.1
45/49	1.0	.9	.8	.5	1.9	1.2	1.1	.7	.0	.4
40/44	4.8	4.6	9.1	5.9	7.5	4.7	6.7	6.3	.0	1.6
35/39	5.6	5.0	3.9	3.4	3.8	4.4	5.5	6.4	.0	.6
30/34	.2	.1	.0	.1	.0	.0	.1	.2	.0	.0
TOTAL	143	129	172	123	165	130	164	166	0	32
PCT	11.7	10.5	14.1	10.0	13.5	10.6	13.4	13.6	.0	2.6

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	54	50	46	41	37	34	32	41.0	664
06009	53	49	46	40	37	34	32	40.6	560
12015	50	46	43	39	36	32	30	38.9	488
18021	52	48	44	39	36	33	30	39.5	603
TOT	54	49	45	40	36	34	30	40.1	2315

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	1.8	6.0	16.3	32.3	43.6	86	381
06009	.0	1.0	3.7	16.9	32.8	45.6	87	296
12015	.0	1.4	1.0	17.8	30.3	49.5	87	208
18021	.0	.6	4.4	16.4	27.9	50.7	87	341
TOT	0	15	51	205	378	577	87	1226

MAY

PERIOD: (PRIMARY) 1944-1969  
(OVER-ALL) 1909-1969

AREA 5010 ATTU  
51-55N 172-180E

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	29	33	37	41	45	49	53	TOT	W	WD
	32	36	40	44	48	52	56		FOG	FOG
11/13	.0	.0	.0	.0	.1	.5	.1	8	.1	.5
9/10	.0	.0	.0	.1	1.0	.2	.0	17	.1	1.2
7/8	.0	.0	.0	.4	2.0	.1	.0	32	.4	2.0
6	.0	.0	.0	1.1	.6	.0	.0	22	.2	1.5
5	.0	.0	.1	2.4	1.4	.0	.0	50	.5	3.3
4	.0	.0	.3	4.0	.5	.0	.0	64	.3	4.6
3	.0	.0	.5	5.8	.1	.0	.0	84	.8	5.5
2	.0	.0	4.4	7.7	.2	.0	.0	163	1.2	11.2
1	.0	.2	5.9	3.8	.2	.0	.0	133	1.4	8.6
0	.0	.8	20.9	4.0	.1	.0	.0	339	2.2	23.5
-1	.0	.0	7.7	.9	.0	.0	.0	113	.8	7.7
-2	.0	1.7	7.2	.7	.1	.0	.0	127	1.0	8.6
-3	.0	1.0	4.1	.2	.0	.0	.0	69	.2	5.0
-4	.1	2.0	1.7	.1	.0	.0	.0	51	.1	3.8
-5	.1	.8	.5	.0	.0	.0	.0	18	.1	1.3
-6	.4	.2	.5	.0	.0	.0	.0	14	.0	1.1
-7/-8	.4	.3	.1	.0	.0	.0	.0	10	.0	.8
-9/-10	.1	.2	.0	.0	.0	.0	.0	4	.0	.3
TOTAL	13	94	709	410	81	10	1	1318	123	1195
PCT	1.0	7.1	53.8	31.1	6.1	.8	.1	100.0	9.3	90.7

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N						NE						48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	1-3	4-10	11-21	22-33	34-47	48+		
<1	.2	.7	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	2	5
1-2	.0	1.2	2.7	.0	.0	.0	.0	.4	.7	.0	.0	.0	6	22
3-4	.0	.4	1.1	.4	.0	.0	.0	1.1	.4	.0	.0	.0	8	10
5-6	.0	.2	1.2	.4	.2	.0	.0	.2	.5	.0	.2	.0	5	11
7	.0	.0	.7	.9	.2	.0	.0	.0	1.2	.4	.0	.0	9	10
8-9	.0	.0	.4	.7	.0	.0	.0	.0	.0	.0	.0	.0	0	6
10-11	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	0	2
12	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	1
13-16	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	0	1
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
TOTAL	1	14	35	16	2	0	0	11	16	2	1	0	30	68
PCT	.2	2.5	6.2	2.8	.4	.0	.0	2.0	2.8	.4	.2	.0	5.3	12.1

HGT	E						SE						48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	1-3	4-10	11-21	22-33	34-47	48+		
<1	.5	.9	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	2	8
1-2	.0	2.7	1.2	.0	.0	.0	.0	1.2	1.8	.0	.0	.0	17	22
3-4	.0	.9	1.8	.2	.0	.0	.0	.7	2.7	1.4	.0	.0	27	16
5-6	.0	.2	.7	.7	.0	.0	.0	.4	.7	.5	.0	.0	9	9
7	.0	.0	.5	.2	.0	.0	.0	.0	.4	1.4	.0	.0	10	4
8-9	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.4	.4	.0	10	0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.2	.0	2	0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	0	0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
TOTAL	3	26	24	6	1.1	.0	.0	15	32	27	5	.0	79	59
PCT	.5	4.6	4.3	1.1	.0	.0	.0	2.7	5.7	4.8	.9	.0	14.0	10.5

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S										SW										TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.2	.5	.0	.0	.0	.0	4	.4	.5	.0	.0	.0	.0	5	.0	.0	.0	.0	.0	.0	5
1-2	.4	2.1	2.7	.0	.0	.0	29	.4	2.0	1.6	.0	.0	.0	22	.0	.0	.0	.0	.0	.0	22
3-4	.0	1.1	3.2	.7	.0	.0	28	.0	.5	1.6	.4	.0	.0	14	.0	.0	.0	.0	.0	.0	14
5-6	.0	.4	2.7	.7	.0	.0	21	.0	.2	2.5	.2	.0	.0	16	.0	.0	.0	.0	.0	.0	16
7	.0	.0	1.1	1.1	.0	.0	12	.0	.0	.5	.2	.0	.0	4	.0	.0	.0	.0	.0	.0	4
8-9	.0	.0	.4	.2	.0	.0	3	.0	.0	.2	.2	.0	.0	2	.0	.0	.0	.0	.0	.0	2
10-11	.0	.0	.0	.4	.0	.0	2	.0	.0	.0	.4	.0	.0	2	.0	.0	.0	.0	.0	.0	2
12	.0	.0	.0	.4	.0	.0	2	.0	.0	.2	.2	.0	.0	2	.0	.0	.0	.0	.0	.0	2
13-16	.0	.0	.0	.5	.4	.0	5	.0	.0	.0	.0	.5	.0	3	.0	.0	.0	.0	.0	.0	3
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	3	23	56	22	2	0	106	4	18	37	8	3	0	70	0	0	0	0	0	0	70
PCT	.5	4.1	9.9	3.9	.4	.0	18.8	.7	3.2	6.6	1.4	.5	.0	12.4	.0	.0	.0	.0	.0	.0	12.4

HGT	W										NW										GRAND TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.2	.4	.0	.0	.0	.0	3	.0	.9	.0	.0	.0	.0	5	.0	.0	.0	.0	.0	.0	34
1-2	.4	4.4	1.4	.0	.0	.0	35	.2	1.1	2.1	.0	.0	.0	19	.0	.0	.0	.0	.0	.0	172
3-4	.0	1.2	2.1	1.4	.0	.0	27	.0	.4	1.1	.0	.0	.0	8	.0	.0	.0	.0	.0	.0	138
5-6	.0	.2	1.4	.7	.0	.0	13	.0	.0	.7	.4	.0	.0	6	.0	.0	.0	.0	.0	.0	90
7	.0	.0	1.1	.7	.0	.0	10	.0	.0	1.8	.4	.0	.0	12	.0	.0	.0	.0	.0	.0	71
8-9	.0	.0	.4	.5	.0	.0	5	.0	.0	.2	.4	.0	.0	2	.0	.0	.0	.0	.0	.0	28
10-11	.0	.0	.0	.4	.0	.0	2	.0	.0	.0	.0	.0	.0	1	.0	.0	.0	.0	.0	.0	11
12	.0	.0	.0	.2	.0	.0	1	.0	.0	.0	.4	.0	.0	2	.0	.0	.0	.0	.0	.0	10
13-16	.0	.0	.0	.0	.0	.0	1	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	10
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	3	35	37	22	0	0	97	1	13	33	8	0	0	55	0	0	0	0	0	0	564
PCT	.5	6.2	6.6	3.9	.0	.0	17.2	.2	2.3	5.9	1.4	.0	.0	9.8	.0	.0	.0	.0	.0	.0	100.0

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1969

MAY

AREA 0010 ATTU  
51-55N 172-180E

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)						TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+	
<1	10.8	4.1	.0	.0	.0	.0	94
1-2	1.8	13.5	12.7	.0	.0	.0	176
3-4	.0	5.6	12.4	4.0	.0	.0	138
5-6	.0	1.4	9.4	3.2	.3	.0	90
7	.0	.0	6.5	4.6	.2	.0	71
8-9	.0	.0	1.1	3.0	.3	.0	28
10-11	.0	.0	.3	1.3	.2	.0	11
12	.0	.0	.3	1.0	.3	.0	10
13-16	.0	.0	.2	.6	.8	.0	10
17-19	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0
TOTAL	79	155	270	111	13	0	628
PCT	12.6	24.7	43.0	17.7	2.1	.0	100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.2	16.9	11.2	6.1	1.9	.4	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	343	3
6-7	.0	1.7	4.2	4.3	3.4	2.2	.8	1.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	159	5
8-9	.0	.8	5.1	3.9	7.5	1.8	1.7	1.4	1.5	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	215	6
10-11	.0	.0	.1	.0	.7	.1	1.0	.1	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	20	9
12-13	.0	.0	.1	.1	.2	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	5	6
>13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
INDET	18.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	165	0
TOTAL	176	175	188	130	124	41	32	23	15	3	0	0	0	0	0	0	0	0	0	907	3
PCT	19.4	19.3	20.7	14.3	13.7	4.5	3.5	2.5	1.7	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

JUNE

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TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW	OTHER FRZN PCPN					FGD MO	SMOKE	HAZE	DUST BLWG	SIG DUST SNOW WEA	
N	.4	*	.4	.0	.0	.0	.0	.0	35	.0	1.5	*	*	.0	5.1	290
NNE	.2	.0	.3	.0	.0	.0	.0	.9	19	.0	.6	*	*	.0	3.1	160
NE	.5	*	.3	.0	.0	.0	.0	.9	33	.0	1.5	*	*	.0	3.7	235
ENE	.6	*	.7	.0	.0	.0	.0	1.4	53	.0	.9	.1	.1	.0	3.6	234
E	.9	.1	.9	.0	.0	.0	.0	1.8	69	.0	1.5	*	*	.0	5.4	337
ESE	.5	*	.6	.0	.0	.0	.0	1.1	43	.0	.9	.1	.1	.0	2.4	171
SE	1.0	.0	.5	.0	.0	.0	.0	1.5	58	.0	1.1	*	*	.0	2.0	179
SSE	.8	.1	.3	.0	.0	.0	.0	1.2	48	.0	.8	.1	.1	.0	2.2	166
S	1.3	.0	.9	.0	.0	.0	.0	2.3	87	.0	1.6	.1	.1	.0	3.3	282
SSW	.7	.0	.4	.0	.0	.0	.0	1.1	44	.0	1.1	.1	.1	.0	2.3	176
SW	.6	.1	.6	.0	.0	.0	.0	1.3	52	.0	1.8	.2	.2	.0	2.9	240
WSW	.3	*	.5	.0	.0	.0	.0	.8	30	.0	.8	.0	.0	.0	3.5	198
W	.6	.1	1.3	.0	.0	.0	.0	2.0	77	.0	1.4	.1	.1	.0	7.7	430
WNW	.3	.1	.6	.0	.0	.0	.0	1.0	37	.0	.9	*	*	.0	4.0	228
NW	.1	.1	.4	.0	*	.0	.0	.6	22	.0	.9	*	*	.0	3.1	179
NNW	.2	.1	.2	.0	.0	.0	.0	.5	18	.0	.7	*	*	.0	3.7	190
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
CALM	.1	.0	.3	.0	.0	.0	.0	.4	15	.0	1.1	.0	.0	.0	2.6	158
TOT OBS	354	27	360	0	1	0	0		740	0	737	33	33	0	2343	3853
TOT PCT	9.2	.7	9.3	.0	*	.0	.0	19.2		.0	19.1	.9	.9	.0	60.8	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW	OTHER FRZN PCPN					FGD MO	SMOKE	HAZE	DUST BLWG	SIG DUST SNOW WEA	
00003	5.5	.5	7.4	.0	.0	.0	.0	13.4	140	.0	20.2	.8	.8	.0	65.6	1047
06009	9.6	1.0	8.5	.0	.1	.0	.0	19.1	175	.0	19.4	1.3	1.3	.0	60.2	918
12015	12.8	.7	10.3	.0	.0	.0	.0	23.8	235	.0	13.0	.6	.6	.0	62.6	987
18021	9.1	.8	11.2	.0	.0	.0	.0	21.0	192	.0	24.2	.9	.9	.0	53.9	916
TOT	355	28	360	0	1	0	0		742	0	740	34	34	0	2352	3868
PCT	9.2	.7	9.3	.0	*	.0	.0	19.2		.0	19.1	.9	.9	.0	60.8	100.0

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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)					48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47					00	03	06	09	12	15	18	21
N	.5	2.7	2.1	1.0	.2	.0	365	7.6	13.6	9.0	7.0	10.0	5.7	8.0	5.3	6.4	6.9
NNE	.3	1.7	1.9	.4	*	.0	204	4.3	12.8	4.1	3.5	5.8	3.6	4.0	2.4	6.0	3.0
NE	.5	2.6	2.5	.5	.1	.0	299	6.2	11.8	7.9	4.3	6.3	4.7	6.3	5.5	6.0	6.9
ENE	.1	2.0	2.1	.9	.1	.0	251	5.2	14.5	4.1	4.0	4.2	5.1	6.6	5.5	7.1	5.2
E	.6	3.3	2.8	1.0	.1	.0	379	7.9	12.6	6.8	10.5	7.8	6.3	7.8	8.4	8.1	7.3
ESE	.4	1.5	1.8	.2	*	.0	186	3.9	11.9	3.5	5.1	3.5	3.8	5.4	4.5	3.1	2.6
SE	.6	1.6	1.8	.5	*	.0	213	4.4	11.9	4.8	4.3	4.0	6.2	3.8	4.5	3.6	4.7
SSE	.2	1.3	1.9	.7	*	.0	193	4.0	14.7	4.0	4.3	3.8	5.7	4.0	3.1	3.8	3.9
S	.6	2.7	2.8	1.1	.3	.0	355	7.4	13.6	7.7	7.8	6.1	9.6	6.3	6.9	6.3	10.1
SSW	.2	1.5	2.5	.9	*	.0	242	5.0	14.4	3.8	4.0	4.3	5.1	4.7	8.9	5.5	6.0
SW	.6	2.8	3.2	.6	.1	.0	354	7.4	12.6	6.0	8.8	5.7	8.3	7.7	9.3	7.3	8.6
WSW	.2	2.4	2.2	.3	*	.0	245	5.1	11.3	5.3	5.9	5.1	6.8	5.1	6.7	3.5	3.4
W	.4	4.0	5.0	1.2	.1	.0	514	10.7	13.2	11.4	9.7	13.1	9.6	11.8	9.8	10.0	8.0
WNW	.3	2.0	2.8	.8	*	.0	286	6.0	13.6	5.9	9.4	5.6	4.0	4.8	5.3	7.8	5.6
NW	.3	1.8	2.6	.6	*	.0	257	5.4	13.5	5.6	4.3	5.1	4.5	4.5	6.2	6.1	6.5
NNW	.2	1.8	2.6	.6	*	.0	250	5.2	13.4	4.7	4.8	4.9	5.3	5.8	6.0	5.5	4.9
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	4.2	1714	1997	542	59	0	200	4.2	.0	5.4	2.4	4.9	3.6	3.4	1.7	3.9	6.5
TOT OBS	481	35.8	41.7	11.3	1.2	.0	4793	100.0	12.6	931	373	720	470	726	418	688	465
TOT PCT	10.0					.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)					TOTAL OBS	PCT FREQ	MEAN SPD	00	03	06	HOUR (GMT)					18	21
	0-6	7-16	17-27	28-40	41+							12	15					
N	2.3	6.3	2.5	.8	.0	569	11.9	13.3	13.1	10.5	15.8	9.4	12.0	7.7	12.4	9.9		
NE	2.3	6.1	2.7	.4	.1	550	11.5	13.1	12.0	8.3	10.4	9.8	12.9	11.0	13.1	12.0		
E	2.9	6.0	2.4	.5	.0	565	11.8	12.4	10.3	15.5	11.3	12.1	13.2	12.9	11.2	9.9		
SE	1.9	4.0	2.1	.5	.0	406	8.5	13.2	8.8	8.6	7.8	11.9	7.8	7.7	7.4	8.6		
S	2.9	5.0	4.1	.4	.1	597	12.5	13.9	11.5	11.8	10.4	14.7	11.0	15.8	11.8	16.1		
SW	2.9	6.7	2.6	.3	.0	599	12.5	12.1	11.3	14.7	10.8	15.1	12.8	16.0	10.8	12.0		
W	3.1	8.4	4.6	.5	.0	800	16.7	13.4	17.3	19.0	18.6	13.6	16.6	15.1	17.9	13.5		
NW	1.9	5.5	2.7	.5	.0	507	10.6	13.5	10.3	9.1	10.0	9.8	10.3	12.2	11.6	11.4		
VAR	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0		
CALM	4.2	2298	1134	189	9	200	4.2	.0	5.4	2.4	4.9	3.6	3.4	1.7	3.9	6.5		
TOT OBS	1163	47.9	23.7	3.9	.2	4793	100.0	12.6	931	373	720	470	728	418	688	465		
TOT PCT	24.3						100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	WIND SPEED (KNOTS)					PCT		TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	MEAN	
00003	6.3	34.2	42.3	11.3	1.5	.0	4.5	1304
06009	5.8	36.5	41.3	11.1	.9	.0	4.4	1190
12015	5.0	36.0	45.1	9.9	1.2	.0	2.8	1146
18021	6.3	36.5	37.9	13.0	1.3	.0	4.9	1153
TOT	281	1714	1997	542	59	0	200	4793
PCT	5.9	35.8	41.7	11.3	1.2	.0	4.2	100.0

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WND DIR	BY WIND DIRECTION							MEAN CLOUD COVER
	0-2	3-4	5-7	8	9	TOTAL		
N	.2	.4	1.6	5.8	265	7.3		
NNE	.1	.1	1.1	3.3	153	7.4		
ENE	.1	.1	1.2	4.0	187	7.4		
E	.1	.1	.8	4.8	196	7.6		
ESE	.1	.1	.9	8.3	309	7.8		
SE	.1	.1	.3	3.8	141	7.7		
SSE	.0	.0	.3	3.7	134	7.9		
S	.1	.1	.9	5.6	224	7.6		
SSW	.2	.1	.7	3.4	149	7.4		
SW	.1	.2	1.1	4.6	197	7.6		
WSW	.1	.1	.6	4.4	170	7.7		
W	.4	.3	2.5	8.6	391	7.4		
WNW	.2	.2	1.3	4.2	200	7.3		
NW	.2	.1	.8	3.7	160	7.3		
NNW	.4	.2	1.0	3.9	181	7.1		
VAR	.0	.0	.0	.0	0	.0		
CALM	.1	.1	.7	3.4	142	7.6		
TOT OBS	75	79	539	2647	3340	7.5		
TOT PCT	2.2	2.4	16.1	79.3	100.0			

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WND DIR	AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION										TOTAL OBS
	000	150	300	600	1000	2000	3500	5000	6500	8000+	
N	1.1	.3	.3	.8	1.5	2.2	.6	.1	.1	.1	265
NNE	.2	.1	.4	.5	1.3	1.2	.3	.1	.0	.4	153
ENE	.6	.1	.1	.5	1.5	1.4	.4	.1	.0	.8	187
E	.9	.2	.1	.5	1.9	1.1	.5	.1	.0	.5	196
ESE	1.5	.4	.1	1.1	2.5	2.1	.5	.1	.0	.7	309
SE	.8	.2	.2	.3	1.2	1.0	.1	.0	.0	.4	141
SSE	.9	.1	.3	.4	1.3	.8	.2	.0	.0	.1	141
S	.7	.1	.1	.3	1.6	.7	.2	.0	.0	.2	134
SSW	1.6	.1	.4	.5	1.7	1.2	.3	.1	.0	.6	224
SW	.7	.2	.4	.5	1.2	.7	.1	.0	.0	.5	149
WSW	1.1	.2	.7	.6	1.4	1.0	.1	.0	.0	.6	197
W	.4	.3	.1	.4	2.4	.6	.4	.0	.0	.4	170
WNW	1.2	.7	.4	1.3	3.4	2.0	.8	.1	.1	1.7	391
NW	.5	.1	.2	.5	1.9	1.6	.3	.0	.0	.8	200
NNW	.5	.1	.1	.6	1.8	.9	.1	.0	.0	.5	160
VAR	.7	.1	.2	.3	2.0	1.1	.1	.1	.0	.8	181
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOT OBS	477	111	143	323	1011	685	177	33	19	14	142
TOT PCT	14.3	3.3	4.3	9.7	30.3	20.5	5.3	1.0	.6	.4	3340
											100.0



TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)									
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0		
= OR >6500	.6	.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
= OR >5000	1.3	1.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
= OR >3500	3.9	6.5	7.2	7.4	7.4	7.4	7.4	7.4	7.4	7.4
= OR >2000	12.3	23.8	26.8	27.6	27.9	28.0	28.0	28.0	28.0	28.0
= OR >1000	21.2	45.1	54.5	57.1	58.0	58.3	58.3	58.3	58.3	58.3
= OR >600	22.8	50.0	62.0	66.1	67.4	67.8	67.9	67.9	67.9	67.9
= OR >300	23.2	51.6	64.9	69.7	71.4	72.1	72.2	72.2	72.2	72.2
= OR >150	23.3	52.5	66.5	71.8	74.0	75.2	75.5	75.5	75.5	75.5
= OR > 0	23.6	53.4	68.4	76.0	80.4	85.3	89.3	89.6	89.6	89.6
TOTAL	786	1780	2280	2533	2679	2843	2976	2985	2985	2985

TOTAL NUMBER OF OBS: 3332

PCT FREQ NH <5/8: 10.4

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

										TOTAL
										OBS
0	1	2	3	4	5	6	7	8	OBSCD	
1.6	1.5	2.9	2.1	2.5	3.4	6.6	10.8	57.5	11.1	3658

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.1	.1	.1	.3	.2	.2	.3	.1	.2	.0	.0	.0	.3	1	*	.1	.0	.0	.73	1.9
NO PCP	.9	.2	.6	.4	.9	.5	.7	.4	1.0	.5	.8	.3	.7	.3	.4	.5	.0	.9	382	10.0
TOTAL	1.0	1.1	1.7	1.7	1.1	1.7	1.0	1.5	2.0	1.5	1.8	1.3	1.0	1.4	1.5	1.6	0	34	455	11.9
PCP	.2	.1	.2	.1	.3	.3	.3	.3	.5	.2	.2	.1	.4	.2	.0	*	.0	*	125	3.3
NO PCP	.1	.1	.2	.3	.3	.2	.2	.3	.2	.2	.3	.1	.3	.2	.1	.0	.0	.0	116	3.0
TOTAL	1.0	1.5	1.5	1.4	1.6	1.8	1.8	2.1	2.7	1.4	2.0	1.0	2.6	1.4	1	1	0	1	241	6.3
PCP	.1	.0	.1	.4	.5	.2	.3	.3	.5	.2	.4	.2	.3	.1	.1	.1	.0	.1	151	3.9
NO PCP	.2	.2	.4	.3	.4	.2	.2	.3	.5	.4	.5	.2	.6	.2	.3	.2	.0	.1	197	5.1
TOTAL	1.2	1.6	1.8	1.7	1.9	1.9	1.9	2.6	3.9	2.4	3.8	1.6	3.3	1.4	1.4	.9	0	9	348	9.1
PCP	.3	.2	.3	.5	.5	.3	.4	.4	.6	.4	.5	.1	.4	.2	.2	.2	.0	.2	220	5.7
NO PCP	.6	.2	.7	.4	1.0	.4	.3	.6	.8	.6	.7	.8	1.3	.9	.7	.4	.0	.3	414	10.8
TOTAL	3.3	3.9	4.7	4.9	5.5	5.0	5.1	5.4	6.9	5.5	6.4	3.6	6.4	4.3	3.2	2.5	0	16	634	16.5
PCP	.2	.2	.2	.2	.4	.2	.2	.1	.3	.2	.1	.2	.5	.3	.2	.1	.0	.1	136	3.5
NO PCP	2.0	1.4	1.2	1.6	2.7	1.1	1.0	.8	1.5	.7	1.2	1.3	3.4	1.7	1.2	1.2	.0	1.7	993	25.9
TOTAL	8.3	6.2	5.3	6.8	12.0	5.0	4.5	3.0	6.9	3.6	4.7	5.8	15.0	7.9	5.5	5.0	0	68	1129	29.4
PCP	.1	*	.1	*	.0	.0	*	.0	.1	.1	.1	.1	.1	.0	*	.0	.0	.0	31	.8
NO PCP	2.8	1.5	2.1	1.7	1.7	.9	.8	.7	1.0	1.0	1.4	1.6	2.9	1.5	1.4	2.1	.0	.8	996	26.0
TOTAL	11.2	6.0	8.3	6.6	6.6	3.3	3.0	2.7	4.4	4.2	5.8	6.5	11.6	5.9	5.6	8.1	0	29	1027	26.8
TOTAL PCT	286 7.5	159 4.1	234 6.1	233 6.1	335 8.7	171 4.5	179 4.7	166 4.3	281 7.3	176 4.6	240 6.3	198 5.2	429 11.2	224 5.8	177 4.9	189 4.9	0	157 4.1	3834 100.0	

JUNE

PERIOD: (PRIMARY, 1950-1969  
(OVER-ALL), 1957-1969

AREA 0010 ATTU  
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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KT.S	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.1	.1	.1	*	.1	.1	.2	*	*	.0	*	.0	.1	*	.1	*	.0	.7	82	1.7
	4-10	.4	.1	.4	.2	.4	.3	.3	.1	.5	.1	.2	*	.4	.2	.2	.4	.0		203	4.3
	11-21	.2	.1	.2	.3	.3	.1	.2	.2	.5	.2	.3	.3	.1	.1	.1	.1	.0		168	3.5
	22+	.1	.1	*	.1	.1	*	.1	*	.1	.1	.1	.0	.1	.0	.0	*	.0		34	.7
	TOTAL	38	15	30	27	41	25	39	17	50	19	30	13	43	19	17	29	0	35	467	10.2
1/2<1	0-3	.0	.0	.0	.0	.1	.0	.0	.0	.1	.0	.0	.0	*	.0	.0	.0	.0	*	11	.2
	4-10	*	.1	.2	.1	.1	.2	*	.1	.1	*	.1	.1	.2	.1	.1	.0	.0		73	1.5
	11-21	.1	*	.1	.2	.2	.2	.3	.3	.2	.2	.2	.1	.3	.1	*	*	.0		123	2.6
	22+	.1	.0	*	*	.1	.0	.1	.1	.3	.1	.1	*	.1	*	.0	.0	.0		58	1.2
	TOTAL	10	6	16	14	27	19	19	22	33	15	23	10	30	14	5	1	0	1	265	5.6
1<2	0-3	*	*	.0	.0	.2	*	*	.0	.0	.0	.1	*	*	*	*	*	.0	.3	35	.7
	4-10	.1	.1	.2	.2	.1	.1	.3	.1	.1	.1	.2	.2	.3	.2	.1	*	.0		106	2.2
	11-21	.1	.1	.2	.2	.2	.2	.3	.4	.4	.4	.7	.3	.6	.2	.1	.1	.0		210	4.4
	22+	*	.0	.1	.2	.3	.0	*	.1	.4	.2	.3	*	.1	.1	.1	.1	.0		97	2.0
	TOTAL	14	8	24	25	37	16	20	29	46	35	64	27	43	22	16	10	0	12	448	9.4
2<5	0-3	.0	.0	.1	*	*	.1	*	.0	.1	*	.1	.1	.1	.1	*	.0	.0	.4	57	1.2
	4-10	.4	.2	.4	.3	.4	.2	.3	.2	.5	.3	.6	.6	.6	.3	.2	.1	.0		262	5.5
	11-21	.3	.2	.5	.3	.5	.4	.3	.5	.6	.7	.8	.3	.8	.5	.6	.4	.0		361	7.6
	22+	.3	.1	.2	.2	.3	.1	.1	.2	.3	.3	.1	.1	.4	.3	.3	.1	.0		158	3.3
	TOTAL	45	26	53	36	59	33	36	42	70	58	81	54	85	56	51	33	0	20	838	17.6
5<10	0-3	.1	*	*	*	.1	.1	.1	.1	.2	.1	.1	.1	.1	.1	.1	.1	.0	1.8	154	3.2
	4-10	.5	.6	.5	.6	1.6	.4	.4	.3	.8	.5	.7	.7	1.3	.6	.5	.3	.0		469	10.3
	11-21	1.1	.8	.7	.7	.9	.6	.4	.3	.7	.5	.6	.6	1.8	1.2	1.1	.9	.0		612	12.8
	22+	.5	.2	.2	.2	.3	.1	.2	.2	.1	.2	.1	.1	.3	.3	.2	.3	.0		177	3.7
	TOTAL	104	78	68	74	138	58	54	47	88	60	76	68	173	97	89	73	0	87	1432	30.0
10+	0-3	.3	.1	.3	.0	.1	*	.2	*	.2	.1	.2	*	.1	.1	.1	*	.0	.9	140	2.9
	4-10	1.2	.6	1.0	.8	.8	.3	.4	.4	.7	.5	1.0	.8	1.3	.6	.8	.9	.0		574	12.0
	11-21	1.3	.6	.8	.6	.6	.4	.3	.3	.5	.5	.4	.7	1.2	.7	.7	1.1	.0		507	10.6
	22+	.3	.1	.1	.1	.1	*	.0	*	.1	.1	.1	.0	.3	.1	.1	.1	.0		75	1.6
	TOTAL	149	69	106	73	75	35	45	36	67	54	79	73	138	74	76	103	0	44	1296	27.2
	TOTAL	360	202	297	249	377	186	213	193	354	241	353	245	512	282	254	249	0	199	4766	100.0
	PCT	7.6	4.2	6.2	5.2	7.9	3.9	4.5	4.0	7.4	5.1	7.4	5.1	10.7	5.9	5.3	5.2	.0	4.2	100.0	

JUNE

PERIOD: (PRIMARY) 1950-1969  
(OVER-ALL) 1927-1969

AREA 0010 ATTU  
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH > 4/8), AND  
OCCURRENCE OF NH < 5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL ANY HGT	NH < 5/8 TOTAL OBS
00003	12.8	2.1	3.0	8.5	31.0	21.7	5.2	1.2	.4	.5	86.4	13.6 922
06009	13.0	4.1	4.5	10.2	29.0	19.4	6.0	.4	.5	.2	87.3	12.7 814
12015	15.7	3.2	4.5	10.8	28.4	19.9	5.2	1.5	.5	.3	89.9	10.1 873
18021	14.9	4.0	5.0	8.7	30.9	20.3	4.7	.8	.9	.5	90.6	9.4 784
TOT	478	111	143	323	1012	691	179	33	19	14	3003	390 3393
PCT	14.1	3.3	4.2	9.5	29.8	20.4	5.3	1.0	.6	.4	89.5	11.5 100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	8.1	4.2	6.7	14.2	32.0	34.8	906
06009	8.4	4.8	8.0	14.0	32.2	32.6	798
12015	8.6	5.0	8.7	19.8	34.2	23.7	860
18021	12.4	3.9	7.3	14.8	32.9	28.6	768
TOT	309	149	256	525	1094	999	3332
PCT	9.3	4.5	7.7	15.8	32.8	30.0	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET, NH > 4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH < 5/8 AND 5+	TOTAL OBS
00003	12.6	19.4	40.6	48.2	11.1	906
06009	13.0	23.8	44.9	43.9	11.3	798
12015	16.0	26.3	51.0	40.6	8.4	860
18021	15.1	25.7	43.8	47.7	6.5	768
TOT	472	789	1517	1502	313	3332
PCT	14.2	23.7	45.5	45.1	9.4	100.0

JUNE

PERIOD: (PRIMARY) 1950-1969  
(OVER-ALL) 1927-1969

AREA 0010 ATTU  
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TABLE 13

TEMP F	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP									TOTAL OBS	PCT FREQ
	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100			
60/64	.0	.0	.0	.0	.0	.1	.0	.0	1	.1	
55/59	.0	.0	.0	.0	.0	.3	.5	.0	11	.7	
50/54	.0	.0	.0	.1	.5	1.1	4.4	2.2	123	8.3	
45/49	.0	.0	.0	.2	.5	3.1	8.4	15.7	416	27.9	
40/44	.0	.0	.0	.0	.6	4.8	11.9	39.4	845	56.7	
35/39	.0	.0	.0	.0	.0	.2	1.6	4.5	94	6.3	
TOTAL	0	0	0	4	25	142	398	921	1490	100.0	
PCT	.0	.0	.0	.3	1.7	9.5	26.7	61.8			

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP										
N	NE	E	SE	S	SW	W	NW	VAR	CALM	
.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
.1	.1	.1	.0	.3	.1	.1	.0	.0	.0	.1
.7	.9	.5	1.2	1.7	1.0	.5	.9	.0	.0	.6
2.5	3.5	2.5	3.6	4.6	4.1	2.8	1.7	.0	.0	2.7
7.1	5.8	7.2	4.9	6.0	7.2	9.7	7.4	.0	.0	1.4
1.4	.5	1.1	.0	.1	.2	1.3	1.6	.0	.0	.1
177	162	169	145	189	187	214	174	0	0	73
11.9	10.9	11.3	9.7	12.7	12.6	14.4	11.7	.0	.0	4.9

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR										
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS	
00003	60	54	50	43	39	37	34	44.1	1281	
06009	60	54	50	43	39	37	35	43.5	1177	
12015	57	49	45	41	38	37	36	41.6	1130	
18021	58	52	48	42	38	37	35	42.2	1142	
TOT	60	53	49	43	39	37	34	42.9	4730	

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR										
HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS		
00003	.0	.3	1.3	10.4	30.5	57.6	90	394		
06009	.0	.2	1.2	11.4	26.6	60.3	90	403		
12015	.0	.4	2.2	7.0	22.5	67.9	91	271		
18021	.0	.2	2.1	8.5	25.9	63.2	90	424		
TOT	0	4	25	142	399	922	90	1492		

PERIOD: PRIMARY) 1950-1969  
(SECONDARY) 1927-1969

JUNE

AREA 0010 ATTU  
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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	33	37	41	45	49	53	57	TOT	W FOG	WO FOG
14/16	.0	.0	.0	.0	.2	.1	.1	9	.1	.2
11/13	.0	.0	.0	*	.6	.3	.1	26	.4	.6
9/10	.0	.0	.0	.6	.8	.3	*	48	.8	1.0
7/8	.0	.0	.1	1.8	.9	.1	.0	76	1.1	1.8
6	.0	.0	.5	1.3	.4	.0	.0	56	.7	1.4
5	.0	.0	.8	2.1	.3	.0	.0	83	.6	2.5
4	.0	.0	2.7	3.6	.2	.0	.0	174	1.1	5.4
3	.0	.2	3.0	1.2	.1	.0	.0	121	1.1	3.5
2	.0	.2	9.3	5.9	*	.0	.0	411	3.0	12.4
1	.0	.8	5.8	.9	.0	.0	.0	198	1.8	5.6
0	.0	6.5	25.8	3.8	.0	.0	.0	962	5.7	30.4
-1	*	3.3	2.6	.2	.0	.0	.0	161	1.3	4.7
-2	.0	5.6	3.8	.4	.0	.0	.0	258	2.3	7.4
-3	.2	.6	.5	.1	.0	.0	.0	36	.2	1.2
-4	.2	.8	.3	.1	.0	.0	.0	37	.6	.8
-5	.0	*	.2	.0	.0	.0	.0	6	.1	.2
-6	.0	.0	*	.0	.0	.0	.0	1	.0	*
-7/-8	.0	*	.1	.0	.0	.0	.0	3	*	.1
TOTAL	13	478	1473	585	91	21	5	2666	558	2108
PCT	.5	17.9	55.3	21.9	3.4	.8	.2	100.0	20.9	79.1

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N										NE										TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.3	1.5	.0	.0	.0	.0	13	.0	1.0	.0	.0	.0	.0	7	.0	1.0	.0	.0	.0	.0	.0
1-2	.6	5.1	1.8	.0	.0	.0	54	.0	2.4	1.7	.0	.0	.0	29	.0	2.4	1.7	.0	.0	.0	.0
3-4	.0	.8	2.2	.0	.0	.0	22	.0	1.4	1.8	.1	.0	.0	24	.0	1.4	1.8	.1	.0	.0	.0
5-6	.0	.0	1.8	.3	.0	.0	15	.0	.0	1.9	.6	.1	.0	19	.0	.0	1.9	.6	.1	.0	.0
7	.0	.1	1.0	.4	.0	.0	11	.0	.0	1.0	.1	.0	.0	8	.0	.0	1.0	.1	.0	.0	.0
8-9	.0	.0	.1	.1	.0	.0	2	.0	.1	.3	.3	.0	.0	5	.0	.1	.3	.3	.0	.0	.0
10-11	.0	.0	.1	.8	.1	.0	8	.0	.1	.0	.0	.0	.0	1	.0	.1	.0	.0	.0	.0	.0
12	.0	.0	.0	.3	.1	.0	3	.0	.0	.1	.0	.0	.0	1	.0	.0	.1	.0	.0	.0	.0
13-16	.0	.0	.0	.1	.1	.0	2	.0	.0	.1	.0	.0	.0	1	.0	.0	.1	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0
TOTAL	6	55	51	15	3	0	130	0	36	50	8	1	0	95	0	36	50	8	1	0	95
PCT	.8	7.6	7.1	2.1	.4	.0	18.1	.0	5.0	6.9	1.1	.1	.0	13.2	.0	5.0	6.9	1.1	.1	.0	13.2

HGT	E										SE										TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.4	1.0	.0	.0	.0	.0	10	.3	.1	.0	.0	.0	.0	3	.0	.1	.0	.0	.0	.0	.0
1-2	.1	3.3	2.1	.0	.0	.0	40	.3	1.3	.7	.0	.0	.0	16	.0	1.3	.7	.0	.0	.0	.0
3-4	.0	.7	1.5	.1	.0	.0	17	.0	.1	1.1	.0	.0	.0	9	.0	.1	1.1	.0	.0	.0	.0
5-6	.0	.1	1.5	.3	.0	.0	14	.1	.0	.0	.1	.0	.0	2	.0	.0	.0	.1	.0	.0	.0
7	.0	.0	.3	.6	.0	.0	6	.0	.0	.3	.0	.0	.0	2	.0	.0	.3	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.6	.0	.0	4	.0	.0	.0	.6	.0	.0	.0
10-11	.0	.0	.1	.0	.1	.0	2	.0	.0	.1	.0	.0	.0	1	.0	.0	.1	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.1	.1	.0	.0	2	.0	.0	.1	.0	.0	.0	.0
13-16	.0	.0	.3	.0	.0	.0	2	.0	.0	.0	.3	.0	.0	2	.0	.0	.3	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0
TOTAL	4	37	42	7	1	0	91	5	11	17	8	0	0	41	0	11	17	8	0	0	41
PCT	.6	5.1	5.8	1.0	.1	.0	12.6	.7	1.5	2.4	1.1	.0	.0	5.7	.0	1.5	2.4	1.1	.0	.0	5.7

HGT	S						SW					
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47
<1	.1	.4	.0	.0	.0	.0	4	.4	.6	.0	.0	.0
1-2	.0	.8	.8	.0	.0	.0	12	.0	1.4	1.3	.0	.0
3-4	.0	.1	.6	.0	.0	.0	5	.0	.6	1.0	.0	.0
5-6	.0	.1	.0	.1	.0	.0	2	.0	.3	1.3	.1	.0
7	.0	.0	.4	.0	.0	.0	3	.0	.3	.3	.0	.0
8-9	.0	.0	.3	.0	.0	.0	2	.0	.0	.4	.0	.0
10-11	.0	.0	.0	.0	.0	.0	0	.0	.3	.1	.0	.0
12	.0	.0	.0	.3	.0	.0	2	.0	.0	.1	.0	.0
13-16	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0
TOTAL	1	11	15	3	0	0	30	3	22	32	1	0
PCT	.1	1.5	2.1	.4	.0	.0	4.2	.4	3.1	4.4	.1	.0

HGT	W						NW					
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47
<1	.8	.8	.0	.0	.0	.0	12	.1	1.8	.0	.0	.0
1-2	.0	4.2	1.8	.0	.0	.0	43	.1	1.1	2.2	.0	.0
3-4	.0	1.3	5.1	.3	.0	.0	48	.0	.6	1.8	.0	.0
5-6	.0	.1	2.4	.4	.0	.0	21	.0	.4	1.3	.6	.0
7	.0	.1	2.2	1.3	.1	.0	27	.0	.0	1.1	.4	.0
8-9	.0	.0	1.9	.8	.0	.0	20	.0	.0	.3	.4	.0
10-11	.0	.0	.3	.4	.0	.0	5	.0	.0	.0	1.1	.0
12	.0	.0	.0	.1	.0	.0	0	.0	.0	.0	.1	.0
13-16	.0	.0	.1	.0	.0	.0	2	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0
TOTAL	6	47	100	24	1	0	178	2	28	48	19	0
PCT	.8	6.5	13.9	3.3	.1	.0	24.7	.3	3.9	6.7	2.6	.0



PERIOD: (PRIMARY)  
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TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)								TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+			
<1	11.5	6.5	.0	.0	.0	.0			144
1-2	1.7	17.6	11.1	.0	.0	.0			244
3-4	.1	5.0	13.6	.5	.0	.0			154
5-6	.1	1.0	9.1	2.2	.1	.0			101
7	.0	.5	5.9	2.5	.1	.0			72
8-9	.0	.1	3.0	2.0	.0	.0			41
10-11	.0	.1	.7	2.1	.2	.0			26
12	.0	.0	.4	.7	.1	.0			10
13-16	.0	.0	.5	.5	.1	.0			9
17-19	.0	.0	.0	.0	.0	.0			0
20-22	.0	.0	.0	.0	.0	.0			0
23-25	.0	.0	.0	.0	.0	.0			0
26-32	.0	.0	.0	.0	.0	.0			0
33-40	.0	.0	.0	.0	.0	.0			0
41-48	.0	.0	.0	.0	.0	.0			0
49-60	.0	.0	.0	.0	.0	.0			0
61-70	.0	.0	.0	.0	.0	.0			0
71-86	.0	.0	.0	.0	.0	.0			0
87+	.0	.0	.0	.0	.0	.0			0
TOTAL	108	247	355	85	6	0			801
PCT	13.5	30.8	44.3	10.6	.7	.0			100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	2.0	19.1	14.0	5.5	2.5	.5	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	440	3
6-7	.2	1.8	8.1	6.8	4.6	1.4	.4	.9	.8	.1	.3	.0	.0	.0	.0	.0	.0	.0	.0	254	5
8-9	.1	.6	1.9	2.2	1.6	.8	1.5	.1	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	92	6
10-11	.0	.0	.3	.5	.0	1.7	1.0	.2	.4	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	42	8
12-13	.0	.0	.0	.0	.0	.3	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	12	9
>13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
INDET	15.8	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	160	0
TOTAL	181	215	245	150	87	47	40	14	16	1	4	0	0	0	0	0	0	0	0	1000	3
PCT	18.1	21.5	24.5	15.0	8.7	4.7	4.0	1.4	1.6	.1	.4	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

JULY

PERIOD: (PRIMARY) 1943-196.  
(OVER-ALL) 1924-1969

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TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	PRECIPITATION TYPE				HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
			DRZL	FRZG PCPN	FRZG	SNOW					OTHER FRZN PCPN	FOG	WD PCPN	HAZE	BLWG	
N	.1	.0	.5	.0	.0	.0	.0	.6	13	.0	.8	.0	.0	.0	.0	63
NNE	.1	.0	.4	.0	.0	.0	.0	.5	11	.0	.8	.0	.0	.0	.0	50
NE	.2	.0	.2	.0	.0	.0	.0	.4	9	.0	1.5	*	.0	.0	.0	71
ENE	.1	.0	.3	.0	.0	.0	.0	.4	9	.0	1.1	*	.0	.0	.0	83
E	1.0	.0	.7	.0	.0	.0	.0	1.6	35	.0	2.3	.0	.0	.0	.0	149
ESE	.6	*	.6	.0	.0	.0	.0	1.1	24	.0	1.6	*	.0	.0	.0	101
SE	1.5	*	.8	.0	.0	.0	.0	2.3	50	.0	2.5	.1	.0	.0	.0	147
SSE	.9	*	.6	.0	.0	.0	.0	1.5	33	.0	2.9	*	.0	.0	.0	130
S	1.9	.0	.8	.0	.0	.0	.0	2.7	59	.0	4.1	.1	.0	.0	.0	218
SSW	.8	.1	.8	.0	.0	.0	.0	1.8	39	.0	2.3	.1	*	.0	.0	149
SW	1.6	.1	1.0	.0	.0	.0	.0	2.6	57	.0	3.8	.5	.0	.0	.0	308
WSW	.2	.0	.8	.0	.0	.0	.0	1.0	22	.0	3.1	.0	.0	.0	.0	177
W	.2	.0	.3	.0	.0	.0	.0	.6	12	.0	3.6	.1	*	.0	.0	190
WNW	*	.0	.3	.0	.0	.0	.0	.3	7	.0	1.1	*	.0	.0	.0	76
NW	*	*	.0	.0	.0	.0	.0	.1	2	.0	.9	.0	.0	.0	.0	77
NNW	*	.0	.1	.0	.0	.0	.0	.2	4	.0	.6	.0	.0	.0	.0	49
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
CALM	.1	.0	.3	.0	.0	.0	.0	.4	9	.0	2.5	.0	.0	.0	.0	124
TOT OBS	208	9	182	0	0	0	0	18.3	395	0	831	26	2	908	2	2162
TOT PCT	9.6	.4	8.4	.0	.0	.0	.0	18.3	38.4	.0	1.2	.1	.1	42.0	.1	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
			DRZL	FRZG PCPN	SNOW PCPN					OTHER PCPN	FDG WD	SMOKE HAZE	DUST BLWG	NO SIG	
0003	8.9	.2	6.5	.0	.0	.0	15.3	94	.0	37.4	1.5	.0	.0	45.9	615
0609	10.6	.4	8.0	.0	.0	.0	18.8	101	.0	40.0	1.5	.0	.0	39.8	538
12015	11.0	.9	11.2	.0	.0	.0	22.8	106	.0	30.8	.2	.2	.2	46.0	465
18021	8.1	.4	8.6	.0	.0	.0	17.0	95	.0	44.7	1.4	.2	.2	36.7	559
TOT	208	9	183	0	0	0	18.2	396	0	838	26	2	2	915	2177
PCT	9.6	.4	8.4	.0	.0	.0	18.2		.0	38.5	1.2	.1	.1	42.0	100.0

JULY

PERIOD: (PRIMARY) 1943-1969  
(OVER-ALL) 1924-1969

AREA 0010 ATTU  
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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)					
	0-3	4-10	11-21	22-33	34-47	48+	TOTAL OBS	PCT FREQ	MEAN SPD		00	03	06	09	12	15
N	.6	1.1	1.2	.5	.1	.0	95	3.4	13.0		3.4	1.2	2.2	3.2	3.1	5.1
NNE	.3	1.2	.8	.2	.0	.0	68	2.5	10.8		1.3	2.9	3.0	2.6	3.4	4.9
NE	.5	1.9	.8	.4	*	.0	99	3.6	10.0		3.8	2.9	4.0	4.1	2.1	2.1
ENE	.3	1.2	1.5	.6	.0	.0	99	3.6	13.2		3.7	3.5	3.8	2.9	4.7	4.2
E	.6	2.1	2.8	.8	*	.0	73	6.3	12.9		6.3	5.9	5.4	4.1	6.3	8.1
ESE	.4	1.7	1.9	.3	*	.0	118	4.3	11.7		4.2	6.5	5.4	5.2	5.2	4.3
SE	.5	2.1	3.3	.4	*	.0	174	6.3	12.6		6.6	5.9	6.7	7.6	6.3	6.5
SSE	.6	1.8	2.2	.8	*	.0	149	5.4	13.2		5.0	3.5	5.4	5.2	7.3	5.7
S	1.0	3.4	4.2	1.2	*	.0	270	9.8	13.0		10.6	9.4	10.0	10.5	8.6	1.4
SSW	.4	2.7	2.9	.7	.1	.0	184	6.7	12.5		6.4	8.2	6.2	7.6	6.8	8.7
SW	1.6	5.9	5.7	1.5	.3	.0	414	15.0	12.4		14.7	17.6	11.9	21.5	11.7	15.9
WSW	.2	2.8	4.4	.9	.0	.0	227	8.2	13.9		7.2	7.6	8.4	4.1	10.4	9.9
W	.5	3.8	4.5	.5	*	.0	258	9.4	11.9		10.3	8.8	10.5	7.6	8.1	10.2
WNW	*	1.6	1.7	.3	.0	.0	98	3.6	12.7		2.9	5.9	4.6	4.7	3.1	4.3
NW	.3	1.8	1.6	.2	.1	.0	110	4.0	11.1		4.3	4.1	5.1	4.1	4.9	3.6
NNW	.1	1.0	.9	.1	.1	.0	65	2.4	12.5		2.7	2.9	2.2	2.0	1.8	2.2
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0		.0	.0	.0	.0	.0	.0
CALM	5.7	990	1109	256	26	0	156	5.7	.0		6.7	2.9	5.4	3.2	6.3	2.9
TOT OBS	376	35.9	40.2	9.3	.9	.0	2757	100.0	11.8		624	170	371	344	384	138
TOT PCT	13.6										100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)					
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD			00	03	06	09	12	15
N	1.8	2.5	1.3	.3	*	163	5.9	12.1			4.6	4.1	5.1	5.8	6.5	7.0
NE	2.5	2.9	1.5	.3	.0	198	7.2	11.6			7.5	6.5	7.8	7.0	6.8	8.6
E	2.6	5.3	2.3	.4	.0	291	10.6	12.4			10.4	12.4	10.8	9.3	11.5	10.7
SE	2.4	6.2	2.9	.3	.0	323	11.7	12.8			11.5	9.4	12.1	12.8	13.5	12.3
S	3.6	8.2	4.1	.5	*	454	16.5	12.8			17.0	17.6	16.2	18.0	15.4	10.1
SW	5.2	11.2	5.8	1.0	*	641	23.2	12.9			22.0	25.3	20.2	25.6	22.1	18.2
W	2.8	7.1	2.8	.2	.0	356	12.9	12.1			13.1	14.7	15.1	12.2	11.2	14.1
NW	2.0	3.0	1.1	.2	*	175	6.3	11.6			7.1	7.1	7.3	6.1	6.8	4.9
VAR	.0	.0	.0	.0	.0	0	.0	.0			.0	.0	.0	.0	.0	.0
CALM	5.7	1278	600	86	4	156	5.7	.0			6.7	2.9	5.4	3.2	6.3	2.9
TOT OBS	789	46.4	21.8	3.1	.1	2757	100.0	11.8			624	170	371	344	384	138
TOT PCT	28.6										100.0	100.0	100.0	100.0	100.0	100.0

JULY

PERIOD: (PRIMARY) 1943-1969  
(OVER-ALL) 1924-1969

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	1-3	4-10	11-21	WIND SPEED (KNOTS)				CALM	MEAN	PCT		TOTAL OBS
				22-33	34-47	48+	48+			FREQ	FREQ	
00003	7.7	37.4	38.9	8.7	1.4	.0	5.9	11.7	100.0			794
06009	9.4	38.7	38.0	8.4	1.1	.0	4.3	11.5	100.0			715
12015	4.4	30.5	48.9	10.3	.6	.0	5.4	12.9	100.0			522
18021	9.5	35.4	37.6	10.1	.6	.0	6.9	11.3	100.0			726
TOT	220	990	1109	256	26	0	156	11.8				2757
PCT	8.0	35.9	40.2	9.3	.9	.0	5.7		100.0			

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION								MEAN CLOUD COVER	TOTAL OBS
	0-2	3-4	5-7	8 & OBS	8 & OBS	8 & OBS	8 & OBS	8 & OBS		
N	.2	.1	.4	2.0	47	7.2				
NNE	.0	.1	.1	2.3	43	7.8				
NE	.1	.1	.6	2.7	60	7.6				
ENE	.0	.1	.3	3.4	65	7.8				
E	.1	.1	.6	7.1	135	7.8				
ESE	.2	.0	.2	4.7	86	7.7				
SE	.2	.1	.1	5.8	108	7.6				
SSE	.2	.0	.3	5.2	99	7.7				
S	.2	.1	.8	9.3	178	7.7				
SSW	.2	.2	.9	5.0	107	7.5				
SW	.3	.2	1.8	9.1	196	7.5				
WSW	.1	.1	1.2	7.2	148	7.7				
W	.2	.2	1.5	7.9	168	7.6				
WNW	.1	.1	.6	3.5	72	7.7				
NW	.3	.0	.4	3.1	65	7.4				
NNW	.1	.2	.1	2.2	43	7.5				
VAR	.0	.0	.0	.0	7	.0				
CALM	.1	.1	.7	4.6	95	7.6				
TOT OBS	40	29	184	1462	1715	7.6				
TOT PCT	2.3	1.7	10.7	85.2	100.0					

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION																NH <5/8 ANY HGT	TOTAL OBS
	000 149	150 299	300 599	300 599	600 999	600 999	1000 1999	1000 1999	2000 3499	2000 3499	3500 4999	3500 4999	5000 6499	5000 6499	6500 7999	6500 7999		
N	.5	.0	.3	.3	.2	.2	.6	.6	.6	.6	.1	.1	.0	.0	.0	.0	.3	47
NNE	.8	.0	.2	.2	.3	.3	.4	.4	.5	.5	.2	.2	.0	.0	.0	.0	.1	43
NE	.9	.1	.1	.1	.7	.7	.7	.7	.2	.2	.2	.2	.2	.1	.1	.1	.3	60
ENE	1.3	.0	.4	.4	.2	.2	1.2	1.2	.4	.4	.1	.1	.1	.0	.0	.0	.2	65
E	2.3	.1	.8	.8	1.0	1.0	1.6	1.6	.8	.8	.2	.2	.1	.0	.0	.0	1.0	135
ESE	1.5	.0	.3	.3	.5	.5	1.2	1.2	.8	.8	.2	.2	.1	.0	.0	.0	.5	86
SE	2.6	.2	.6	.6	.4	.4	1.6	1.6	.4	.4	.2	.2	.0	.0	.0	.0	.3	108
SSE	2.6	.2	.3	.3	.6	.6	1.2	1.2	.3	.3	.2	.2	.1	.0	.0	.0	.3	99
S	4.1	.2	1.1	.9	.9	.9	2.0	2.0	.9	.9	.5	.5	.1	.1	.1	.1	.4	178
SSW	1.7	.2	.5	.5	.6	.6	1.5	1.5	.6	.6	.3	.3	.0	.0	.0	.0	.6	107
SW	3.6	.5	1.6	.8	1.2	1.2	2.6	2.6	.7	.7	.3	.3	.1	.1	.1	.1	.9	196
WSW	2.3	.2	.8	.8	1.0	1.0	2.3	2.3	1.1	1.1	.1	.1	.1	.1	.1	.1	.6	148
W	2.8	.1	.5	.5	2.0	2.0	2.2	2.2	1.1	1.1	.3	.3	.1	.1	.1	.1	.7	168
WNW	.8	.1	.2	.2	.5	.5	.9	.9	1.2	1.2	.2	.2	.0	.0	.0	.0	.2	72
NW	.6	.0	.1	.1	.2	.2	.9	.9	1.1	1.1	.2	.2	.2	.1	.1	.1	.4	65
NNW	.3	.1	.0	.0	.2	.2	1.0	1.0	.3	.3	.2	.2	.1	.0	.0	.0	.3	43
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	2.0	.0	.1	.1	.3	.3	1.9	1.9	.6	.6	.1	.1	.0	.0	.0	.0	.3	95
TOT OBS	527	32	135	188	407	407	203	203	6	6	62	62	19	19	10	10	127	1715
TOT PCT	30.7	1.9	7.9	11.0	23.7	23.7	11.8	11.8	3.6	3.6	1.1	1.1	.6	.6	.3	.3	7.4	100.0

JULY

PERIOD: (PRIMARY) 1943-1969  
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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)							
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	.4	.6	.8	.8	.8	.8	.9	.9
= OR >5000	.9	1.7	1.9	1.9	1.9	2.0	2.1	2.1
= OR >3500	2.3	5.0	5.3	5.5	5.6	5.7	5.8	5.8
= OR >2000	6.7	14.0	16.6	17.3	17.5	17.8	17.9	17.9
= OR >1000	13.4	31.0	37.6	40.1	40.6	41.3	41.6	41.7
= OR >600	15.1	36.0	45.2	49.7	51.1	52.1	52.5	52.5
= OR >300	15.5	37.9	49.2	55.6	57.6	59.9	60.4	60.4
= OR >150	15.5	38.0	49.5	56.4	58.6	61.4	62.2	62.3
= OR > 0	16.1	39.7	52.9	61.2	66.1	76.8	90.8	92.5
TOTAL	275	677	902	1042	1126	1308	1548	1577

TOTAL NUMBER OF OBS: 1704

PCT FREQ NH <5/8: 7.5

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	TOTAL OBS							
	0	1	2	3	4	5	6	7
1.1	1.5	1.9	1.2	2.0	1.7	4.0	6.3	56.4
								24.1
								1983

JULY

PERIOD: (PRIMARY) 1943-1969  
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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	* .1	* .1	* .1	* .1	.3	.1	.8	.6	.7	.4	.6	.3	.2	.1	.0	.1	.0	.2	99	4.6
NO PCP	.3	.5	.7	.7	1.2	.9	1.6	1.9	2.9	1.3	3.2	1.8	2.4	.7	.5	.4	.0	1.6	480	22.5
TOTAL	7	12	16	17	31	22	51	53	77	37	30	45	56	16	10	10	0	39	579	27.1
PCP	* .1	* .1	* .1	* .1	.3	.2	.3	.2	.4	.2	.5	.1	.1	.0	.0	* .0	.0	.1	58	2.7
NO PCP	.1	.1	.1	.1	.4	.3	.3	.3	.6	.3	1.5	.7	.4	* .0	.1	.0	.0	.3	118	5.5
TOTAL	3	3	5	3	15	11	12	12	21	11	41	17	10	1	2	1	0	8	176	8.2
PCP	.3	.1	* .1	.1	.4	.3	.5	.3	.7	.5	.4	.1	* .0	.1	* .0	.0	.0	.0	83	3.9
NO PCP	.2	.2	.3	.1	.3	.1	.3	.4	.4	.7	1.6	.7	.6	.3	.2	.2	.0	.4	153	7.2
TOTAL	11	7	7	5	14	9	16	15	23	25	42	18	14	10	6	5	0	9	236	11.0
PCP	.1	.1	.1	.2	.5	.2	.5	.3	.5	.2	.7	.1	.1	.1	.0	* .0	.0	.1	85	4.0
NO PCP	.3	.4	.3	.7	.7	.2	.5	.4	.8	.9	1.8	1.3	1.4	.6	.4	.2	.0	.4	243	11.4
TOTAL	10	10	9	20	25	9	21	15	29	24	54	31	33	15	8	5	0	10	328	15.4
PCP	.1	.2	.1	* .0	.2	.2	.3	.2	.2	.4	.5	.2	.1	.0	* .0	.0	.0	.0	59	2.8
NO PCP	.6	.5	.5	1.0	1.8	1.1	.7	.7	1.5	1.1	2.4	1.7	1.4	.7	1.1	.6	.0	1.6	398	18.6
TOTAL	14	9	12	22	42	28	20	20	37	32	62	40	32	16	25	12	0	34	457	21.4
PCP	.0	.0	.0	.0	.0	.1	* .0	.0	.1	.0	* .0	.1	.0	.0	.0	.0	.0	* .0	11	.5
NO PCP	.8	.4	1.0	.7	.9	.8	1.0	.6	1.1	.8	1.3	1.1	1.9	.8	1.1	.7	.0	1.0	349	16.3
TOTAL	18	8	21	16	20	20	23	13	26	18	29	26	41	18	24	16	0	23	360	16.9
TOTAL	63	49	70	83	147	99	143	128	213	147	308	177	186	76	75	49	0	123	2136	100.0
PCT	2.9	2.3	3.3	3.9	6.9	4.6	6.7	6.0	10.0	6.9	14.4	8.3	8.7	3.6	3.5	2.3	.0	5.8	100.0	

JULY

PERIOD: (PRIMARY) 1943-1969  
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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.1	.0	.1	.1	.1	.1	.0	.2	.3	.2	.5	*	.1	.0	*	*	.0	1.5	91	3.3
	4-10	.1	.3	.3	.1	.4	.3	.6	.7	.5	.5	1.1	.7	1.1	.4	.1	.2	.0		207	7.6
	11-21	.1	.1	.2	.4	.6	.4	1.2	.8	1.5	.6	1.2	1.0	1.3	.2	.1	.1	.0		267	9.8
	22+	.0	*	.0	.1	.1	.1	.1	.3	.5	.2	.3	.0	.0	.0	.1	*	.0		50	1.8
	TOTAL	8	12	17	19	34	25	52	53	77	39	86	47	69	17	10	10	0	40	615	22.6
1/2<1	0-3	*	*	*	.0	*	.0	*	.1	*	.0	.1	*	*	.0	.0	.0	.0	.3	20	.7
	4-10	.0	*	.1	*	.1	.1	.1	.1	.3	.1	.6	.3	.2	.0	.0	.1	.0		58	2.1
	11-21	.1	*	.2	.1	.2	.3	.3	.1	.4	.2	.6	.3	.2	*	.1	*	.0		82	3.0
	22+	.0	.0	.0	.0	.2	*	*	.1	.1	*	.4	.1	.0	.0	.0	.1	.0		33	1.2
	TOTAL	3	3	8	3	15	11	13	12	24	11	43	19	11	1	3	5	0	8	193	7.1
1<2	0-3	.1	.1	*	.0	*	.0	*	.1	.2	*	.2	*	.1	.0	.0	.1	.0	.4	39	1.4
	4-10	.2	.1	.2	.1	.1	.1	.2	.2	.3	.5	.7	.3	.4	.1	.1	.1	.0		104	3.8
	11-21	.3	.1	.0	.1	.3	.2	.3	.1	.4	.4	.6	.2	.1	.1	.1	.0	.0		93	3.4
	22+	.1	.0	*	*	.1	*	.1	.1	.2	.1	.3	.2	.0	.1	.0	.1	.0		41	1.5
	TOTAL	19	8	8	5	16	9	17	17	30	27	48	20	16	11	7	8	0	11	277	10.2
2<5	0-3	*	.0	*	.1	*	.1	.1	.1	.1	.0	.3	*	.0	.0	.0	.0	.0	.6	43	1.6
	4-10	.1	.3	.3	.2	.3	.1	.3	.2	.6	.6	.6	.4	.5	.1	.1	.1	.0		130	4.8
	11-21	.1	.1	.1	.4	.5	.3	.4	.1	.3	.4	1.1	.7	.9	.4	.1	.2	.0		170	6.2
	22+	.3	.1	.1	.3	.2	.0	.1	.2	.2	.1	.2	.2	.1	.1	*	.0	.0		62	2.3
	TOTAL	18	14	14	24	27	14	28	17	36	28	59	36	41	16	9	7	0	17	405	14.9
5<10	0-3	.2	.1	.1	.1	.2	.1	.1	.1	.1	.1	.2	.0	.1	*	.1	.0	.0	1.7	91	3.3
	4-10	.3	.2	.5	.4	.6	.6	.4	.3	1.1	.6	1.7	.6	.8	.4	.7	.1	.0		252	9.2
	11-21	.2	.1	.1	.3	.9	.4	.7	.5	.7	1.0	1.7	1.5	.8	.3	.5	.3	.0		273	10.0
	22+	.1	*	.1	.1	.2	.1	.0	.1	.1	.2	.6	.3	.3	*	.1	.1	.0		69	2.5
	TOTAL	21	14	21	25	51	34	32	27	57	52	112	64	53	22	38	15	0	47	685	25.1
10+	0-3	.1	.1	.3	.1	.2	.1	.2	*	.2	.1	.3	.1	.2	.0	.1	*	.0	1.2	91	3.3
	4-10	.4	.3	.6	.4	.4	.3	.4	.2	.5	.4	1.4	.6	.9	.4	.8	.4	.0		229	8.4
	11-21	.4	.3	.2	.3	.3	.4	.4	.4	.8	.3	.6	.8	1.1	.6	.5	.3	.0		209	7.7
	22+	*	.0	.1	*	.1	.0	.0	.1	*	.1	.1	*	.1	.1	*	.0	.0		23	.8
	TOTAL	26	16	30	23	28	23	28	21	41	24	65	41	64	31	40	19	0	32	552	20.2
	TOTAL	95	67	98	99	171	116	170	147	265	181	413	227	254	98	107	64	0	155	2727	100.0
	PCT	3.5	2.5	3.6	3.6	6.3	4.3	6.2	5.4	9.7	6.6	15.1	8.3	9.3	3.6	3.9	2.3	.0	5.7	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH > 4/8), AND  
OCCURRENCE OF NH < 5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH < 5/8 ANY HG?	TOTAL OBS
00003	24.0	1.6	8.4	12.2	25.3	12.2	3.3	1.0	.8	.4	89.2	10.8	491
06009	30.0	1.9	8.6	9.8	22.8	11.4	4.7	1.6	.2	.0	90.9	9.1	430
12015	35.5	1.8	6.9	9.9	20.3	11.4	3.3	1.0	.5	.5	91.1	8.9	394
18021	32.9	2.1	7.0	10.9	24.4	12.1	3.5	.9	.7	.2	94.7	5.3	431
TOT	529	32	135	188	407	206	64	20	10	5	1596	150	1746
PCT	30.3	1.8	7.7	10.8	23.3	11.8	3.7	1.1	.6	.3	91.4	8.6	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NH) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	21.5	4.0	7.9	15.3	26.6	24.7	478
06009	28.4	5.3	7.0	11.3	25.2	22.8	416
12015	28.8	5.5	7.8	15.8	24.9	17.1	385
18021	29.9	5.9	10.1	13.2	24.7	16.2	425
TOT	459	87	140	237	433	348	1704
PCT	26.9	5.1	8.2	13.9	25.4	20.4	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET, NH > 4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH < 5/8 AND 5+	TOTAL OBS
00003	23.8	36.0	56.7	34.7	8.6	478
06009	30.5	44.7	62.0	32.2	5.8	416
12015	35.8	48.6	67.5	26.5	6.0	385
18021	33.2	46.4	66.4	29.9	3.8	425
TOT	520	742	1071	529	104	1704
PCT	30.5	43.5	62.9	31.0	6.1	100.0



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TABLE 13

TEMP F	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP										TOTAL OBS	PCT FREQ
	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100				
60/64	.0	.0	.0	.1	.3	.3	.1	.0			11	.8
55/59	.0	.0	.0	.1	.1	2.5	2.4	1.6			98	6.7
50/54	.0	.0	.0	.1	.5	1.9	9.0	10.8			324	22.2
45/49	.0	.0	.0	.0	.1	1.9	8.4	46.0			821	56.3
40/44	.0	.0	.0	.0	.1	.2	1.0	12.8			204	14.0
TOTAL	0	0	0	3	15	98	304	1038			1458	100.0
PCT	.0	.0	.0	.2	1.0	6.7	20.9	71.2				

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP											VAR	CALM
N	NE	E	SE	S	SW	W	NW	VAR				
.3	.1	.0	.1	.1	.1	.1	.0	.0			.0	.1
.6	.5	.4	.3	.8	2.1	1.3	.4	.0			.0	.3
1.4	1.3	.9	2.6	3.7	5.7	2.3	1.4	.0			.0	2.9
1.7	3.1	6.7	9.0	11.0	13.0	6.2	3.4	.0			.0	2.3
2.1	1.0	1.8	1.3	2.2	4.0	1.0	.3	.0			.0	.3
89	86	143	194	258	364	158	80	0			0	86
6.1	5.9	9.8	13.3	17.7	25.0	10.8	5.5	.0			.0	5.9

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR											TOTAL OBS
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN			
00003	65	61	56	47	43	41	37	48.3			766
06009	65	52	58	47	43	41	39	48.5			691
12015	56	53	50	45	41	41	39	45.4			555
18021	62	60	54	46	42	39	38	47.0			695
TOT	65	60	56	46	43	41	37	47.4			2657

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR											TOTAL OBS
HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN				
00003	.0	.2	1.6	8.8	25.3	64.1	91				434
06009	.0	.0	1.8	7.4	22.9	67.9	92				393
12015	.0	.4	.0	3.0	12.9	83.7	95				233
18021	.0	.2	.2	6.0	18.5	75.1	93				401
TOT	0	3	15	98	304	1041	92				1461

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	37	41	45	49	53	57	61	65	TOT	M FOG	WD FOG
20/22	.0	.0	.0	.0	.0	.0	.0	.2	3	.1	.1
17/19	.0	.0	.0	.0	.0	.1	.3	.0	6	.2	.2
14/16	.0	.0	.0	.3	.5	.4	.2	.1	26	.5	.8
11/13	.0	.0	.0	.4	.9	.6	.2	.0	39	1.1	1.0
9/10	.0	.0	.7	1.0	1.3	.3	.0	.0	63	1.6	1.8
7/8	.0	.1	1.6	2.9	1.0	.2	.0	.0	109	3.0	2.8
6	.0	.5	1.2	1.8	.3	.1	.0	.0	72	1.8	2.0
5	.0	.6	2.4	3.1	.3	.0	.0	.0	122	3.0	3.5
4	.1	.4	5.9	2.7	.2	.0	.0	.0	175	4.0	5.3
3	.0	1.0	5.0	1.4	.1	.1	.0	.0	141	3.3	4.0
2	.0	2.7	9.8	1.3	.1	.0	.0	.0	261	5.3	8.6
1	.0	2.1	8.3	1.5	.1	.0	.0	.0	225	4.9	7.0
0	.1	5.4	15.2	.5	.1	.0	.0	.0	399	5.9	15.3
-1	.1	2.2	3.9	.1	.0	.0	.0	.0	119	1.4	4.9
-2	.3	1.5	2.2	.0	.0	.0	.0	.0	75	2.0	2.0
-3	.1	.2	.6	.0	.0	.0	.0	.0	16	.5	.4
-4	.1	.4	.5	.0	.0	.0	.0	.0	20	.7	.4
-5	.0	.1	.1	.0	.0	.0	.0	.0	4	.1	.1
-6	.1	.1	.0	.0	.0	.0	.0	.0	2	.1	.1
-7/-8	.1	.2	.0	.0	.0	.0	.0	.0	4	.0	.2
-9/-10	.0	.1	.0	.0	.0	.0	.0	.0	2	.1	.1
TOTAL	14	328	1088	315	91	30	13	.4	1883	746	1137
PCT	.7	17.4	57.5	16.7	4.8	1.6	.7	.2	100.0	39.6	60.4

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N						NE						TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	1-3	4-10	11-21	22-33	34-47	48+			
<1	.1	.7	.0	.0	.0	.0	.7	.7	.0	.0	.0	.0	6	.0	10
1-2	.1	.6	.1	.0	.0	.0	.1	.7	.6	.0	.0	.0	6	.0	10
3-4	.0	.1	1.1	.0	.0	.0	.0	.4	.6	.0	.0	.0	9	.0	7
5-6	.0	.0	.4	.0	.0	.0	.0	.0	.3	.0	.0	.0	3	.0	2
7	.0	.0	.4	.3	.0	.0	.0	.0	.3	.3	.0	.0	5	.0	4
8-9	.0	.0	.1	.3	.0	.0	.0	.0	.1	.1	.1	.0	3	.0	3
10-11	.0	.0	.3	.0	.0	.0	.0	.0	.1	.3	.0	.0	2	.0	3
12	.0	.0	.1	.1	.0	.0	.0	.0	.1	.0	.0	.0	2	.0	1
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	0	.0	2
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	0	.0	2
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	2	10	19	5	0	0	6	13	15	9	1	1	36	0	44
PCT	.3	1.4	2.7	.7	.0	.0	.8	1.8	2.1	1.3	.1	.1	5.1	.0	6.2

HGT	E						SE						TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	1-3	4-10	11-21	22-33	34-47	48+			
<1	.4	.8	.0	.0	.0	.0	.4	1.4	.0	.0	.0	.0	9	.0	13
1-2	.3	2.3	1.7	.0	.0	.0	.0	3.4	1.3	.0	.0	.0	30	.0	33
3-4	.0	.3	2.3	.1	.0	.0	.0	1.6	4.7	.3	.0	.0	19	.0	46
5-6	.0	.1	1.6	.1	.0	.0	.0	.1	2.5	.1	.0	.0	13	.0	20
7	.0	.0	1.0	.7	.0	.0	.0	.0	.7	.6	.0	.0	12	.0	9
8-9	.0	.0	.1	.3	.0	.0	.0	.0	.1	.6	.0	.0	3	.0	5
10-11	.0	.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	2	.0	0
12	.0	.0	.0	.3	.0	.0	.0	.0	.0	.1	.1	.0	2	.0	0
13-16	.0	.0	.1	.3	.0	.0	.0	.0	.6	.3	.0	.0	3	.0	6
17-19	.0	.0	.1	.1	.0	.0	.0	.0	.1	.0	.0	.0	2	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	1
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	5	25	50	15	0	0	3	46	71	14	1	0	95	0	135
PCT	.7	3.5	7.1	2.1	.0	.0	.4	6.5	10.0	2.0	.1	.1	13.4	.0	19.0

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S					SM					TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47			
<1	.1	1.4	.0	.0	.0	.3	2.1	.0	.0	.0	.0	.0	17
1-2	.3	2.4	2.4	.0	.0	.0	2.1	1.8	.0	.0	.0	.0	17
3-4	.0	1.6	3.4	.3	.0	.0	1.6	3.9	.4	.0	.0	.0	28
5-6	.0	.1	3.0	.1	.0	.0	.3	3.0	.4	.0	.0	.0	42
7	.0	.0	1.0	.4	.0	.0	.0	.4	.3	.0	.0	.0	26
8-9	.0	.3	.1	.3	.0	.0	.0	.3	.4	.0	.0	.0	5
10-11	.0	.0	.1	.3	.1	.0	.0	.0	.0	.0	.0	.0	5
12	.0	.0	.4	.3	.0	.0	.0	.0	.0	.0	.0	.0	0
13-16	.0	.0	.3	.4	.0	.0	.0	.0	.0	.0	.0	.0	0
17-19	.0	.0	.3	.6	.0	.0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
TOTAL	3	41	78	20	1	2	43	67	11	0	143	0	123
PCT	.4	5.8	11.0	2.8	.1	.3	6.1	9.4	1.6	.0	20.2	.0	17.3

HGT	NW					TOTAL	48+	TOTAL	GRAND TOTAL
	1-3	4-10	11-21	22-33	34-47				
<1	.3	.8	.0	.0	.0	8	.0	.0	80
1-2	.0	2.5	1.7	.0	.0	30	.0	.0	194
3-4	.0	1.1	3.0	.1	.0	30	.0	.0	205
5-6	.0	.0	1.3	.4	.0	12	.0	.0	104
7	.0	.0	.1	.1	.0	2	.0	.0	49
8-9	.0	.0	.0	.0	.0	0	.0	.0	25
10-11	.0	.0	.0	.0	.0	0	.0	.0	11
12	.0	.0	.0	.1	.0	1	.0	.0	12
13-16	.0	.0	.0	.0	.0	1	.0	.0	17
17-19	.0	.0	.0	.0	.0	0	.0	.0	10
20-22	.0	.0	.0	.0	.0	0	.0	.0	2
23-25	.0	.0	.0	.0	.0	0	.0	.0	0
26-32	.0	.0	.0	.0	.0	0	.0	.0	0
33-40	.0	.0	.0	.0	.0	0	.0	.0	0
41-48	.0	.0	.0	.0	.0	0	.0	.0	0
49-60	.0	.0	.0	.0	.0	0	.0	.0	0
61-70	.0	.0	.0	.0	.0	0	.0	.0	0
71-86	.0	.0	.0	.0	.0	0	.0	.0	0
87+	.0	.0	.0	.0	.0	0	.0	.0	0
TOTAL	2	32	43	6	0	83	0	50	709
PCT	.3	4.5	6.1	.8	.0	11.7	.0	7.1	100.0

JULY

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1969

AREA 0010 ATTU  
51-55N 172-180E

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)								TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+			
<1	10.7	8.0	.0	.0	.0	.0			145
1-2	.9	14.2	10.1	.0	.0	.0			195
3-4	.0	6.8	18.5	1.2	.0	.0			205
5-6	.0	.6	11.6	1.2	.0	.0			104
7	.0	.0	3.9	2.5	.0	.0			49
8-9	.0	.3	1.0	1.8	.1	.0			25
10-11	.0	.0	.6	.6	.1	.0			11
12	.0	.0	.6	.8	.1	.0			12
13-16	.0	.0	.9	1.3	.0	.0			17
17-19	.0	.0	.4	.9	.0	.0			10
20-22	.0	.0	.1	.1	.0	.0			2
23-25	.0	.0	.0	.0	.0	.0			0
26-32	.0	.0	.0	.0	.0	.0			0
33-40	.0	.0	.0	.0	.0	.0			0
41-48	.0	.0	.0	.0	.0	.0			0
49-60	.0	.0	.0	.0	.0	.0			0
61-70	.0	.0	.0	.0	.0	.0			0
71-86	.0	.0	.0	.0	.0	.0			0
87+	.0	.0	.0	.0	.0	.0			0
TOTAL	90	232	370	80	3	0			775
PCT	11.6	29.9	47.7	10.3	.4	.0			100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	2.3	10.6	14.3	5.4	1.7	1.0	.1	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	369	3
6-7	.1	2.7	7.0	6.3	4.3	1.9	1.0	.8	1.2	.4	.2	.0	.0	.0	.0	.0	.0	.0	.0	260	5
8-9	.0	.3	5.9	2.7	2.3	1.8	1.5	.6	1.2	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	171	6
10-11	.0	.0	.0	.2	.2	.0	.1	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	7	8
12-13	.0	.0	.0	.0	.0	.0	.1	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	10
>13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	
INDET	19.5	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	198	0
TOTAL	221	137	274	158	85	47	28	17	27	12	2	0	0	0	0	0	0	0	0	1008	3
PCT	21.9	13.6	27.2	15.7	8.4	4.7	2.8	1.7	2.7	1.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

AUGUST

PERIOD: (PRIMARY) 1944-1969  
(OVER-ALL) 1926-1969

AREA 0010 ATTU  
51-55N 172-180E

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
				FRZG PCPN	SNOW	OTHER FRZN PCPN					FGD WD PCPN	SMOKE HAZE	DUST BLWG	NO SIG WEA	
N	.4	.0	.3	.0	.0	.0	.0	.0	14	.0	.5	.0	.0	1.6	54
NNE	.4	.0	.1	.0	.0	.0	.0	.0	9	.0	.3	.0	.0	.8	30
NE	.5	.0	.3	.0	.0	.0	.0	.0	15	.0	.9	.0	.0	1.4	59
ENE	.1	.0	.3	.0	.0	.0	.0	.0	6	.0	.4	.0	.0	1.2	35
E	.2	.0	.4	.0	.0	.0	.0	.0	12	.0	.9	.0	.0	1.7	63
ESE	.5	.0	.5	.0	.0	.0	.0	.0	17	.0	1.2	.0	.0	1.3	64
SE	1.4	.1	.3	.0	.0	.0	.0	1.8	34	.0	2.7	.1	.0	1.1	107
SSE	.8	.1	.4	.0	.0	.0	.0	1.3	24	.0	2.7	.1	.0	1.2	99
S	.9	.0	1.3	.0	.0	.0	.0	2.2	41	.0	5.6	.2	.0	4.5	235
SSW	1.1	.1	1.5	.0	.0	.0	.0	2.6	49	.0	2.5	.0	.0	3.5	162
SW	1.4	.1	1.6	.0	.0	.0	.0	3.0	57	.0	4.6	.1	.0	6.9	276
WSW	.4	.0	.8	.0	.0	.0	.0	1.2	23	.0	2.9	.1	.0	4.6	168
W	.2	.0	.5	.0	.0	.0	.0	.7	13	.0	2.8	.3	.0	7.6	216
WNW	.2	.1	.3	.0	.0	.0	.0	.5	9	.0	.7	.0	.0	4.5	107
NW	.2	.0	.2	.0	.0	.0	.0	.4	8	.0	.8	.1	.1	3.7	97
NNW	.2	.0	.2	.0	.0	.0	.0	.3	6	.0	1.0	.0	.0	2.0	64
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
CALM	.2	.0	.1	.0	.0	.0	.0	.3	5	.0	1.1	.0	.0	2.3	68
TOT OBS	171	7	171	0	0	0	0	0	342	0	601	15	1	945	1904
TOT PCT	9.0	.4	9.0	.0	.0	.0	.0	18.0	18.0	.0	31.6	.8	.1	49.6	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
				FRZG PCPN	SNOW	OTHER FRZN PCPN					FGD WD PCPN	SMOKE HAZE	DUST BLWG	NO SIG WEA	
00003	9.8	.2	7.5	.0	.0	.0	.0	17.4	91	.0	33.7	1.1	.2	47.6	523
06009	9.4	.2	8.2	.0	.0	.0	.0	16.8	84	.0	32.7	1.2	.0	49.3	501
12015	6.5	.7	12.3	.0	.0	.0	.0	19.6	81	.0	26.4	.0	.0	54.0	413
18021	9.4	.4	8.8	.0	.0	.0	.0	18.1	89	.0	33.0	.6	.0	48.3	491
TOT	171	7	174	0	0	0	0	18.1	345	0	611	15	1	956	1928
PCT	8.9	.4	9.0	.0	.0	.0	.0	17.9	17.9	.0	31.7	.8	.1	49.6	100.0

AUGUST

PERIOD: (PRIMARY) 1944-1969  
(OVER-ALL) 1926-1969

AREA 0010 ATTU  
51-55N 172-180E

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-3	4-10	11-21	22-33	34-47	48+	TOTAL OBS	PCT FREQ	MEAN SPD	00	03	06	09	12	15
N	.5	1.4	.8	.4	.1	.0	74	3.1	11.9	3.0	2.9	3.1	4.4	2.8	4.2
NNE	.1	.6	.7	.4	.0	.0	44	1.8	14.5	1.4	2.0	2.2	2.1	2.2	2.2
NE	.3	1.2	1.1	.3	.0	.0	69	2.9	11.2	2.8	1.0	3.4	2.9	3.7	1.9
ENE	.2	.7	.7	.0	.0	.0	38	1.6	9.5	.5	1.0	3.1	2.1	1.8	3.4
E	.7	2.1	.7	.0	.0	.0	84	3.5	8.1	5.0	2.0	3.1	1.8	4.0	1.9
ESE	.3	1.3	1.0	.4	*	.0	71	3.0	12.1	2.8	2.0	3.1	2.4	1.8	4.1
SE	.8	1.6	2.3	.6	.2	.0	132	5.5	12.4	4.4	9.8	4.6	7.6	4.9	2.2
SSE	.5	1.8	2.4	.3	.0	.0	119	5.0	11.9	5.3	7.8	4.0	5.0	5.2	6.7
S	.8	4.7	4.7	1.0	.1	.0	268	11.2	12.3	11.9	8.8	11.1	10.9	10.5	3.5
SSW	.3	3.0	3.4	1.3	.2	.0	193	8.1	14.1	9.1	14.7	9.3	8.5	8.3	11.5
SW	1.6	6.2	6.3	1.5	.1	.0	373	15.6	12.0	14.6	18.7	13.6	19.7	13.5	19.1
WSW	.3	3.4	3.9	1.0	.1	.0	210	8.8	13.4	8.5	5.9	13.0	7.1	11.1	8.9
W	1.7	4.2	4.5	1.2	.0	.0	275	11.5	11.5	12.3	10.8	9.9	10.6	11.4	12.4
WNW	.3	2.7	1.8	.6	.0	.0	127	5.3	11.9	5.0	8.3	6.5	3.8	5.8	3.5
NW	.6	2.3	2.2	.3	.0	.0	126	5.3	11.5	5.2	2.0	5.3	4.1	5.5	5.4
NNW	.2	1.4	1.3	.3	*	.0	78	3.3	12.6	2.8	5.9	4.3	3.2	2.8	2.5
VAR	.0	.0	.0	.0	0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	4.3	921	897	225	21	0	103	4.3	.0	5.2	1.0	3.1	3.8	4.6	7.3
TOT OBS	320	38.6	37.6	9.4	.9	.0	2384	100.0	11.6	562	102	323	340	325	314
TOT PCT	13.4									100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD	00	03	06	09	12	15	18
N	1.4	2.1	1.1	.4	.0	118	4.9	12.8	4.4	4.9	5.3	6.5	4.9	4.2	5.1
NE	1.4	2.3	.5	.2	.0	107	4.5	10.6	3.4	3.9	6.5	5.0	5.5	5.2	1.9
E	2.3	3.3	.8	.1	.0	155	6.5	9.9	7.8	6.9	7.4	4.1	5.8	3.1	6.4
SE	2.6	3.5	2.1	.3	*	251	10.5	12.2	9.8	17.6	8.7	12.6	10.2	13.5	10.2
S	4.1	9.8	4.5	.9	*	461	19.3	13.1	21.0	17.6	20.4	19.4	18.8	21.9	17.2
SW	5.4	12.8	5.6	.6	.0	583	24.5	12.5	23.1	20.6	22.6	26.8	24.6	26.0	23.0
W	4.4	8.7	3.3	.5	.0	402	16.9	11.6	17.3	19.6	16.4	14.4	17.2	16.7	15.9
NW	1.9	4.3	2.3	.1	.0	204	8.6	12.0	8.0	7.8	9.6	7.4	8.3	9.4	8.0
VAR	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	4.3	1162	481	74	2	103	4.3	.0	5.2	1.0	3.1	3.8	4.6	.0	7.3
TOT OBS	665	48.7	20.2	3.1	.1	2384	100.0	11.6	562	102	323	340	325	96	314
TOT PCT	27.9								100.0	100.0	100.0	100.0	100.0	100.0	100.0

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

WIND DIR	HOUR	WIND SPEED (KNOTS)						PCT		TOTAL OBS
		1-3	4-10	11-21	22-33	34-47	48+	CALM	MEAN	
N	00003	10.2	39.3	36.7	8.1	1.1	.0	4.5	11.3	564
NNE	06009	11.5	40.9	35.6	7.7	.9	.0	3.5	11.0	653
NE	12015	3.8	37.1	43.2	11.9	.5	.0	3.6	12.9	421
ENE	18021	9.0	36.6	36.9	11.0	.9	.0	5.5	11.7	636
E	TOT	217	921	897	225	21	0	103	11.6	2384
ESE	PCT	9.1	36.6	37.6	9.4	.9	.0	4.3	100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION						MEAN CLOUD COVER
	0-2	3-4	5-7	8 &	ORSCD	TOTAL OBS	
N	.2	.0	.6	1.9	42	7.3	
NNE	.0	.1	.3	1.5	30	7.6	
NE	.0	.1	.1	3.0	50	7.9	
ENE	.0	.0	.4	1.7	33	7.8	
E	.1	.1	.3	2.8	50	7.6	
ESE	.0	.1	.1	3.5	57	7.9	
SE	.1	.0	.2	5.0	81	7.9	
SSE	.1	.0	.5	4.8	85	7.7	
S	.2	.2	1.0	9.3	174	7.7	
SSW	.2	.3	.8	6.9	129	7.5	
SW	1.4	.3	1.5	10.3	210	7.0	
WSW	.8	.2	.6	7.5	140	7.2	
W	1.2	.6	2.2	7.4	177	6.8	
WNW	.5	.5	1.9	3.6	100	6.8	
NW	.1	.3	1.2	3.7	84	7.2	
NNW	.2	.1	1.2	2.4	61	7.1	
VAR	.0	.0	.0	.0	0	.0	
CALM	.2	.2	.5	2.4	52	7.0	
TOT OBS	80	47	209	1219	1555	7.3	
TOT PCT	5.1	3.0	13.4	78.4	100.0		

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

WIND DIR	AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION												TOTAL OBS
	000	149	150	299	300	599	600	999	1000	2000	3500	5000	
N	.5	.0	.0	.1	.1	.1	.1	.1	.9	.4	.1	.1	42
NNE	.5	.0	.0	.1	.1	.1	.1	.1	.6	.5	.0	.1	30
NE	1.1	.0	.0	.1	.1	.1	.1	.1	.9	.6	.1	.0	50
ENE	.5	.0	.0	.0	.0	.0	.0	.0	.6	.3	.1	.0	33
E	1.0	.0	.0	.1	.1	.1	.1	.1	.8	.6	.1	.0	50
ESE	1.3	.0	.0	.2	.2	.2	.2	.2	.9	.5	.0	.0	57
SE	2.5	.1	.1	.3	.3	.3	.3	.3	1.5	.2	.0	.0	81
SSE	2.8	.0	.0	.5	.5	.5	.5	.5	.6	.5	.0	.0	85
S	4.8	.1	.1	.3	.3	.3	.3	.3	3.2	1.0	.1	.0	174
SSW	2.3	.0	.0	.3	.3	.3	.3	.3	2.4	.8	.0	.0	129
SW	3.4	.1	.1	.5	.5	.5	.5	.5	3.4	1.3	.3	.0	210
WSW	2.6	.1	.1	.2	.2	.2	.2	.2	2.6	.8	.3	.1	140
W	2.0	.0	.0	.3	.3	.3	.3	.3	2.5	2.3	.6	.1	177
WNW	.6	.0	.0	.1	.1	.1	.1	.1	2.1	.9	.4	.0	100
NW	1.0	.0	.0	.1	.1	.1	.1	.1	1.4	1.1	.5	.1	84
NNW	1.2	.0	.0	.2	.2	.2	.2	.2	.8	.8	.1	.0	61
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.5	.0	.0	.0	.0	.0	.0	.0	1.4	.5	.1	.0	52
TOT OBS	443	5	52	145	9.3	26.8	13.1	3.1	1.0	.3	.3	.3	1555
TOT PCT	28.5	.3	3.3	9.3	26.8	13.1	3.1	.3	14.0	100.0			



CUMULATIVE PCT FREQ OF SIMULTANEDUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)									
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0		
= OR >6500	.3	.6	.6	.6	.6	.6	.6	.6		
= OR >5000	.6	1.4	1.5	1.6	1.6	1.6	1.6	1.6		
= OR >3500	2.1	4.3	4.5	4.7	4.7	4.7	4.7	4.7		
= OR >2000	8.8	15.7	16.7	17.5	17.8	17.9	17.9	17.9		
= OR >1000	14.1	34.5	40.1	43.3	44.0	44.7	45.1	45.2		
= OR >600	14.8	39.8	47.7	51.8	52.8	53.9	54.4	54.5		
= OR >300	14.9	40.4	49.3	53.9	55.3	56.6	57.8	57.9		
= OR >150	14.9	40.4	49.4	54.1	55.4	56.8	58.1	58.2		
= OR > 0	15.3	41.9	52.9	60.2	63.3	73.2	84.4	85.7		
TOTAL	236	647	817	929	976	1129	1303	1323		

TOTAL NUMBER OF OBS: 1543 PCT FREQ NH <5/8: 14.3

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

										TOTAL
0	1	2	3	4	5	6	7	8	OBS	OBS
2.5	2.3	4.4	2.1	2.5	2.5	6.2	5.7	44.8	27.0	1619

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.1	.1	.0	.1	.1	.3	.5	.4	.4	.3	.3	.3	.2	.1	.0	.0	.0	.1	56	3.0
NO PCP	.4	.2	.6	.2	.9	1.7	1.7	2.1	3.9	1.7	2.7	1.5	1.2	.4	.5	.7	.0	.7	379	20.3
TOTAL	8	4	12	6	18	23	41	47	80	37	55	33	26	8	9	13	0	15	435	23.2
PCP	.0	.2	.0	.0	.1	.1	.1	.1	.3	.3	.6	.2	.0	.0	.0	.1	.0	.0	37	2.0
NO PCP	.0	.1	.1	.0	.1	.1	.1	.3	.3	.2	.3	.4	.4	.1	.0	.1	.0	.1	47	2.5
TOTAL	0	4	2	0	3	3	2	8	12	10	17	11	8	1	0	2	0	1	84	4.5
PCP	.5	.2	.2	.1	.2	.1	.4	.1	.7	.8	.7	.1	.2	.2	.2	.1	.0	.0	90	4.8
NO PCP	.1	.1	.2	.1	.1	.1	.3	.1	.7	.3	1.2	.9	.8	.3	.2	.1	.0	.2	105	5.6
TOTAL	11	4	8	3	6	4	12	4	27	20	36	18	19	9	7	4	0	3	195	10.4
PCP	.2	.1	.4	.1	.2	.3	.5	.4	.4	.7	1.1	.3	.1	.1	.2	.2	.0	.1	100	5.3
NO PCP	.2	.1	.2	.1	.1	.2	.5	.3	1.2	.7	1.6	.9	1.0	.2	.4	.2	.0	.4	154	8.2
TOTAL	7	3	10	2	5	10	22	13	30	26	51	23	19	6	11	7	0	9	254	13.6
PCP	.0	.1	.1	.1	.0	.1	.3	.2	.3	.5	.3	.3	.3	.1	.1	.0	.0	.0	47	2.5
NO PCP	.5	.3	.6	.9	.9	.7	1.1	.6	2.8	2.1	3.6	2.6	3.3	2.6	1.8	1.1	.0	.7	489	26.1
TOTAL	10	7	13	18	16	15	25	15	58	49	73	54	66	49	34	20	0	14	536	28.6
PCP	.0	.0	.1	.0	.1	.0	.0	.1	.0	.0	.1	.1	.0	.1	.1	.0	.0	.1	11	.6
NO PCP	1.0	.4	.6	.3	.7	.4	.2	.5	1.3	1.0	2.1	1.2	3.7	1.7	1.8	.9	.0	1.3	356	19.0
TOTAL	18	7	14	5	14	8	4	12	25	18	40	25	69	32	34	16	0	26	367	19.6
TOTAL	54	29	59	34	62	63	106	99	232	160	272	164	207	105	95	62	0	68	1871	100.0
PCT	2.9	1.5	3.2	1.8	3.3	3.4	5.7	5.3	12.4	8.6	14.5	8.8	11.1	5.6	5.1	3.3	.0	3.6	100.0	

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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.1	.0	.0	.1	.2	.1	.1	.1	.2	.1	.1	.0	.1	*	.1	.0	.0	.6	47	2.0
	4-10	.2	.1	.2	.1	.5	.5	.1	.6	1.0	.4	.9	.7	.5	.2	.1	.3	.0		146	6.2
	11-21	.1	.1	.3	*	.1	.2	1.1	1.4	2.0	.9	1.3	.7	.5	.1	.2	.3	.0		220	9.4
	22+	.0	.0	*	.0	.0	.2	.4	.0	.2	.1	.2	.1	*	.0	.0	.0	.0		29	1.2
	TOTAL	8	4	12	6	19	23	41	47	80	37	58	35	26	8	10	13	0	15	442	18.8
1/2<1	0-3	.0	*	.0	.0	.0	.0	*	.1	.0	*	.1	*	*	.0	.0	.0	.0	.1	12	.5
	4-10	.0	.0	*	.0	*	.0	*	.2	.3	.1	.3	.1	.1	.0	*	*	.0		31	1.3
	11-21	.0	.1	.1	.0	.1	*	.0	*	.2	.1	.2	.3	.2	*	.0	*	.0		31	1.3
	22+	.0	*	.0	.0	.0	.1	.0	*	.0	.2	.2	*	.1	.0	.0	*	.0		17	.7
	TOTAL	0	4	3	0	3	3	2	9	12	10	17	11	9	1	1	3	0	3	91	3.9
1<2	0-3	*	.0	*	*	*	.0	.1	*	.0	*	.2	.0	.1	*	*	.0	.0	.2	21	.9
	4-10	.2	*	*	*	.2	*	.1	*	.6	.2	.6	.2	.4	.1	.2	.1	.0		72	3.1
	11-21	.1	.0	.2	*	*	*	.2	.1	.4	.4	.6	.3	.3	.2	.1	.1	.0		73	3.1
	22+	.3	.1	.1	.0	.0	.1	.1	*	.3	.3	.4	.3	.1	.1	*	*	.0		54	2.3
	TOTAL	13	4	9	3	7	4	12	6	31	22	41	18	20	10	9	6	0	5	220	9.4
2<5	0-3	.2	.0	.1	.0	.1	*	.1	.1	.2	*	.2	.1	.1	*	*	.0	.0	.9	53	2.3
	4-10	.2	.1	.2	*	.1	.1	.4	.5	.6	.4	1.2	.3	.6	.2	.2	.2	.0		124	5.3
	11-21	.1	*	.1	*	.1	.3	.3	.2	.6	.5	1.1	.5	.5	.1	.2	.2	.0		116	4.9
	22+	.1	.1	.1	.0	.0	.1	.1	.0	.2	.3	.5	.3	.1	.1	*	.0	.0		48	2.0
	TOTAL	14	5	13	2	6	11	23	19	38	31	69	29	30	10	12	9	0	20	341	14.5
5<10	0-3	.0	.0	*	.0	.0	.1	.2	*	.2	.0	.5	.1	.6	.1	.1	*	.0	.6	65	2.8
	4-10	.3	.1	.2	.3	.7	.4	.7	.2	1.2	1.2	1.9	1.1	1.1	1.2	.7	.5	.0		277	11.8
	11-21	.1	.3	.2	.6	.2	.1	.3	.3	1.0	.3	1.7	1.4	1.3	.8	.9	.3	.0		251	10.7
	22+	*	.2	*	.0	.0	.0	.1	.1	.3	.3	.2	.3	.6	.2	.1	.2	.0		64	2.7
	TOTAL	10	13	15	19	20	15	31	16	64	61	102	68	83	55	43	23	0	19	657	28.0
10+	0-3	.2	.1	.1	*	.3	*	.3	.1	.1	.1	.6	.1	.8	*	.3	.1	.0	1.7	120	5.1
	4-10	.6	.2	.5	.2	.6	.3	.3	.4	1.1	.7	1.4	.9	1.4	.9	1.0	.3	.0		255	10.9
	11-21	.3	.3	.1	*	.3	.3	.3	.3	.3	.3	1.3	.8	1.7	.6	.7	.4	.0		191	8.1
	22+	*	.0	.0	.0	.0	.0	.0	.1	.1	.1	.2	.1	.3	.2	*	.1	.0		31	1.3
	TOTAL	29	13	17	7	28	14	22	22	39	29	82	45	97	41	49	22	0	41	597	25.4
	TOTAL	74	43	69	37	83	70	131	119	264	190	369	206	265	125	124	76	0	103	2348	100.0
	PCT	3.2	1.8	2.9	1.6	3.5	3.0	5.6	5.1	11.2	8.1	15.7	8.8	11.3	5.3	5.3	3.2	.0	4.4	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8), AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	27.9	.2	4.5	10.3	25.3	13.1	2.4	1.0	.2	.2	85.2	14.8	419
06009	25.1	.3	3.3	10.8	28.2	12.6	3.3	1.5	.5	.3	85.9	14.1	390
12015	32.0	.8	2.9	9.0	24.9	13.0	2.4	.3	.3	.3	85.7	14.3	378
18021	29.2	.0	2.3	6.9	29.2	13.3	4.1	1.3	.0	.5	86.7	13.3	391
TOT	450	5	52	146	424	205	48	16	4	5	1355	223	1578
PCT	28.5	.3	3.3	9.3	26.9	13.0	3.0	1.0	.3	.3	85.9	14.1	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NH) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	22.1	4.2	6.9	10.3	31.9	24.8	408
06009	21.8	3.1	7.3	9.7	33.3	24.7	381
12015	23.7	3.3	7.9	16.6	27.8	20.7	367
18021	23.5	2.1	8.5	12.4	29.5	24.0	387
TOT	351	49	118	188	473	364	1543
PCT	22.7	3.2	7.6	12.2	30.7	23.6	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NH) AND/OR  
CEILING HGT (FEET, NH >4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00003	26.5	34.8	51.7	35.8	12.5	408
06009	24.9	31.0	50.9	36.5	12.6	381
12015	31.1	37.9	58.0	29.2	12.8	367
18021	28.9	33.9	52.2	36.4	11.4	387
TOT	429	530	820	533	190	1543
PCT	27.8	34.3	53.1	34.5	12.3	100.0

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TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL DBS	PCT PREC
65/69	.0	.0	.0	.0	.1	.1	.0	.0	3	.2
60/64	.0	.0	.0	.1	.3	1.1	.2	.1	27	1.9
55/59	.0	.0	.0	.0	.1	2.7	3.6	3.3	149	10.4
50/54	.0	.0	.1	.0	.3	1.0	11.2	25.4	547	38.1
45/49	.0	.0	.0	.4	.5	2.3	7.4	36.7	679	47.3
40/44	.0	.0	.0	.0	.0	.4	.7	1.0	30	2.1
TOTAL	0	0	1	10	26	111	332	955	1435	100.0
PCT	.0	.0	.1	.7	1.8	7.7	23.1	66.6		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
65/69	.0	.0	.0	.0	.0	.0	.0	.1	.0	.1
60/64	.4	.0	.1	.1	.2	.3	.3	.2	.0	.2
55/59	.6	.5	.4	1.1	2.0	2.6	1.6	.3	.0	1.3
50/54	1.6	1.2	1.3	4.0	8.7	11.4	5.4	2.3	.0	1.9
45/49	1.5	1.6	2.9	6.2	11.3	11.4	7.9	4.0	.0	.6
40/44	.2	.5	.2	.1	.1	.2	.6	.2	.0	.0
TOTAL	62	54	69	164	320	372	226	108	0	60
PCT	4.3	3.8	4.8	11.4	22.3	25.9	15.7	7.5	.0	4.2

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOURL (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL DBS
00003	66	63	58	50	45	43	39	50.8	653
06009	66	63	59	50	45	43	39	51.0	649
12015	66	57	54	48	45	43	39	48.2	422
18021	62	59	55	50	45	43	41	49.7	618
TOT	66	62	57	50	45	43	39	50.1	2342

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOURL (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN	TOTAL DBS
00003	.0	.7	2.6	10.0	25.3	61.3	91	419
06009	.0	1.0	1.7	9.7	23.3	64.4	91	404
12015	.0	1.0	.0	4.3	18.6	76.2	94	210
18021	.0	.5	2.0	5.1	23.9	68.5	92	410
TOT	0	11	26	111	337	958	92	1443

AUGUST

PERIOD: (PRIMARY) 1944-1969  
(OVER-ALL) 1926-1969

AREA 0010 ATTU  
51-55N 172-180E

TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	41	45	49	53	57	61	65	TOT	W	FOG	WD
	44	48	52	56	60	64	68				
20/22	.0	.0	.0	.0	.0	.1	.1	2	.1	.0	.0
17/19	.0	.0	.0	.0	.0	.2	.0	3	.0	.2	.3
14/16	.0	.0	.0	.2	.2	.1	.0	7	.1	.3	.2
11/13	.0	.0	.6	.9	1.3	.1	.0	49	.6	2.2	2.8
9/10	.0	.0	1.5	1.6	.7	.1	.0	66	1.1	3.9	2.6
7/8	.0	.5	2.5	2.5	.2	.0	.0	98	1.9	3.7	4.6
6	.0	.6	3.2	.6	.1	.0	.0	76	1.9	2.6	3.7
5	.0	2.0	3.9	1.1	.0	.0	.0	119	3.2	4.6	6.2
4	.0	3.2	3.0	1.1	.3	.0	.0	128	2.9	6.2	11.5
3	.0	5.2	3.5	.7	.0	.0	.0	159	3.2	7.6	13.6
2	.1	10.0	5.7	1.7	.0	.0	.0	298	6.0	13.6	3.5
1	.3	7.7	2.9	.4	.0	.0	.0	192	3.7	1.1	.5
0	.8	9.8	7.4	.6	.0	.0	.0	319	5.0	.8	.1
-1	.4	3.0	.8	.1	.0	.0	.0	73	1.1	.5	.3
-2	.3	2.9	1.1	.0	.0	.0	.0	15	.4	1.1	.3
-3	.1	.6	.2	.0	.0	.0	.0	7	.1	.1	.1
-4	.1	.9	.2	.0	.0	.0	.0	3	.1	.1	.1
-5	.2	.2	.1	.0	.0	.0	.0	3	.1	.1	.1
-6	.1	.1	.0	.0	.0	.0	.0	3	.1	.1	.1
TOTAL	36	796	626	193	48	7	1	1707	550	1157	57.8
PCT	2.1	46.6	36.7	11.3	2.8	.4	.1	100.0	32.2	57.8	

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N							NE							TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+		
<1	.1	.1	.0	.0	.0	.0	2	.1	.1	.0	.0	.0	.0	2	
1-2	.1	.6	.5	.0	.0	.0	10	.1	1.0	1.5	.0	.0	.0	21	
3-4	.0	.7	.5	.0	.0	.0	10	.0	.4	1.1	.2	.0	.0	14	
5-6	.0	.0	.0	.1	.1	.0	2	.0	.0	.0	.0	.0	.0	0	
7	.0	.0	.1	.4	.0	.0	4	.0	.0	.0	.1	.0	.0	1	
8-9	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
10-11	.0	.0	.0	.1	.0	.0	1	.0	.0	.0	.0	.0	.0	0	
12	.0	.0	.0	.1	.0	.0	1	.0	.0	.0	.1	.0	.0	1	
13-16	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
TOTAL	2	12	9	6	1	0	30	2	12	21	4	0	0	39	
PCT	.2	1.5	1.1	.7	.1	.0	3.6	.2	1.5	2.5	.5	.0	.0	4.7	

HGT	E							SE							TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	
<1	.1	1.3	.0	.0	.0	.0	12	.1	.6	.0	.0	.0	.0	6	
1-2	.1	2.4	.8	.0	.0	.0	28	.0	1.6	2.2	.0	.0	.0	31	
3-4	.0	.4	.4	.0	.0	.0	6	.0	.7	2.9	.1	.0	.0	31	
5-6	.0	.0	.2	.5	.0	.0	6	.0	.0	1.2	1.1	.0	.0	19	
7	.0	.0	.1	.4	.0	.0	4	.0	.0	.0	.2	.1	.0	3	
8-9	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.1	.0	.0	1	
10-11	.0	.0	.0	.0	.0	.0	0	.0	.0	.2	.1	.0	.0	3	
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
13-16	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
TOTAL	2	34	13	7	0	0	56	1	24	54	14	1	0	94	
PCT	.2	4.1	1.6	.8	.0	.0	6.8	.1	2.9	6.5	1.7	.1	.0	11.4	

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S					SW					TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47	
<1	.2	.5	.0	.0	.0	.0	1.1	.0	.0	.0	.0
1-2	.1	3.8	4.2	.0	.0	.1	4.0	1.7	.0	.0	.0
3-4	.1	1.9	5.7	1.2	.0	.0	2.4	4.5	.0	.0	.0
5-6	.0	.1	3.5	.6	.5	.1	.4	4.2	1.3	.0	.0
7	.0	.0	.4	.4	.1	.0	.0	1.0	.7	.0	.0
8-9	.0	.0	.0	.1	.1	.0	.2	.2	.5	.0	.0
10-11	.0	.0	.0	.2	.0	.0	.0	.1	.1	.0	.0
12	.0	.0	.0	.1	.0	.0	.6	.1	.4	.0	.0
13-16	.0	.0	.0	.4	.0	.0	.0	.0	.0	.1	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOTAL	4	52	115	25	6	2	67	98	28	1	196
PCT	.5	6.3	13.9	3.0	.7	.2	8.1	11.9	3.4	.1	23.7

HGT	W					NW					TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47	
<1	.2	.5	.0	.0	.0	.2	.2	.0	.0	.0	.0
1-2	.2	4.8	1.6	.0	.0	.0	1.5	.7	.0	.0	.0
3-4	.0	.8	2.5	.0	.0	.0	1.2	1.8	.0	.0	.0
5-6	.0	.2	2.4	.6	.0	.0	.0	.2	.0	.0	.0
7	.0	.0	.8	.8	.0	.0	.1	.6	.5	.0	.0
8-9	.0	.2	.4	.7	.0	.0	.0	.2	.1	.0	.0
10-11	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.1	.1	.0	.0	.0	.0	.1	.0	.0
13-16	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOTAL	4	55	66	20	0	2	25	36	6	1	826
PCT	.5	6.7	8.0	2.4	.0	.2	3.0	3.6	.7	.1	7.7



PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1969

AUGUST

AREA 0010 ATTU  
51-55N 172-180E

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)								TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+			
<1	5.5	4.3	.0	.0	.0	.0			85
1-2	1.4	18.6	12.5	.0	.0	.0			283
3-4	.2	8.2	18.4	1.8	.0	.0			249
5-6	.1	.7	11.3	4.0	.6	.0			145
7	.0	.1	2.9	3.3	.2	.0			57
8-9	.0	.5	.8	1.5	.1	.0			25
10-11	.0	.0	.7	.6	.0	.0			11
12	.0	.0	.1	.9	.0	.0			9
13-16	.0	.0	.0	.5	.2	.0			6
17-19	.0	.0	.0	.0	.0	.0			0
20-22	.0	.0	.0	.0	.0	.0			0
23-25	.0	.0	.0	.0	.0	.0			0
26-32	.0	.0	.0	.0	.0	.0			0
33-40	.0	.0	.0	.0	.0	.0			0
41-48	.0	.0	.0	.0	.0	.0			0
49-60	.0	.0	.0	.0	.0	.0			0
61-70	.0	.0	.0	.0	.0	.0			0
71-86	.0	.0	.0	.0	.0	.0			0
87+	.0	.0	.0	.0	.0	.0			0
TOTAL	63	281	406	110	10	0			870
PCT	7.2	32.3	46.7	12.6	1.1	.0			100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT	
<6	1.3	15.9	18.2	8.1	2.5	.4	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	499	3
6-7	.1	3.0	9.4	8.7	2.7	2.5	1.2	.4	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	304	4
8-9	.0	.7	1.1	3.0	3.4	.2	.5	.6	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	103	6
10-11	.0	.1	.0	.0	.1	.1	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4	7
12-13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	
>13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	
INDET	14.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	158	0
TOTAL	173	210	306	212	93	34	21	10	9	0	0	0	0	0	0	0	0	0	0	0	1068	3
PCT	16.2	19.7	28.7	19.9	8.7	3.2	2.0	.9	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

SEPTEMBER

PERIOD: (PRIMARY) 1944-1969  
(OVER-ALL) 1904-1969

AREA 0010 ATTU  
51-55N 172-180E

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ		TOTAL	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
				FRZG	SNOW	OTHER		PCPN AT	DB TIME			PCPN	FOG	SMOKE	DUST	
				PCPN		PCPN				OBS		PCPN	WD	HAZE	BLWG	SIG
N	.8		.6	.0	.0	.0	.0	.0	1.5	21	.0	1.2	.0	.1	.0	6.9
NNE	.9	.1	.4	.0	.0	.0	.0	.0	1.4	19	.0	.3	.0	.1	.1	2.8
NE	.5	.1	.4	.0	.0	.0	.0	.0	1.1	15	.0	.6	.0	.0	.0	3.5
ENE	.6	.1	.3	.0	.0	.0	.0	.0	.9	13	.0	.4	.0	.0	.0	1.2
E	1.1	.1	.9	.0	.0	.0	.0	.0	1.9	27	.0	.4	.0	.0	.0	3.1
ESE	.6	.1	.6	.0	.0	.0	.0	.0	1.2	17	.0	.6	.0	.0	.0	3.0
SE	1.0	.0	.4	.0	.0	.0	.0	.0	1.4	19	.0	.6	.0	.0	.0	2.3
SSE	.8	.0	.4	.0	.0	.0	.0	.0	1.1	16	.0	.5	.0	.1	.0	1.9
S	.7	.1	.5	.0	.0	.0	.0	.0	1.3	18	.0	1.1	.0	.0	.0	2.7
SSW	.3	.0	.6	.0	.0	.0	.0	.0	.9	13	.0	.6	.0	.1	.0	2.4
SW	.8	.0	.4	.0	.0	.0	.0	.0	1.2	17	.0	.7	.0	.0	.0	4.3
WSW	.0	.3	.1	.0	.0	.0	.0	.0	.4	6	.0	.7	.0	.1	.0	6.6
W	.6	.2	.2	.0	.0	.0	.0	.0	1.0	14	.0	1.9	.2	.0	.0	9.7
WNW	.4	.0	.1	.0	.0	.0	.0	.0	.4	6	.0	.5	.0	.0	.0	5.7
NW	.3	.2	.2	.0	.0	.0	.0	.0	.7	10	.0	.6	.0	.1	.0	6.4
NNW	.3	.0	.4	.0	.0	.0	.0	.0	.6	9	.0	.7	.0	.1	.0	5.4
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0
CALM	.0	.0	.1	.0	.0	.0	.0	.0	.1	2	.0	.2	.0	.0	.0	2.4
TOT OBS	133	18	93	0	0	0	0	0	17.3	242	0	162	11	11	1	982
TOT PCT	9.5	1.3	6.7	.0	.0	.0	.0	.0	17.3	242	.0	11.6	.8	.8	.1	70.2
																100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ		TOTAL	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
				FRZG	SNOW	OTHER		PCPN AT	DB TIME			PCPN	FOG	SMOKE	DUST	
				PCPN		PCPN				OBS		PCPN	WD	HAZE	BLWG	SIG
00003	10.2	1.1	4.9	.0	.0	.0	.0	.0	16.2	20	.0	15.4	.3	.3	.3	67.9
06009	7.7	1.1	6.0	.0	.0	.0	.0	.0	14.5	53	.0	12.9	1.4	.6	.0	71.2
12015	10.0	.6	5.5	.0	.0	.0	.0	.0	16.1	50	.0	5.5	.0	.0	.0	77.3
18021	10.1	2.2	10.1	.0	.0	.0	.0	.0	22.1	79	.0	11.5	.8	.8	.0	65.6
TOT	133	18	93	0	0	0	0	0	17.2	242	0	162	11	11	1	989
PCT	9.5	1.3	6.6	.0	.0	.0	.0	.0	17.2	242	.0	11.5	.8	.8	.1	70.4
																100.0

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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	34-47	00	03	06	09	12					15	18	21					
N	.9	3.4	3.7	1.2	.1	.0	181	9.4	13.3	9.9	9.7	8.7	10.4	6.6	9.4	8.9	12.4					
NNE	.2	1.6	1.3	1.1	.3	.0	86	4.5	16.7	3.2	2.8	3.0	3.2	6.9	6.3	6.0	5.2					
NE	1.0	2.3	1.1	1.2	.0	.0	110	5.7	12.0	5.2	8.3	5.0	8.8	4.2	3.1	4.6	7.6					
ENE	.1	.4	1.1	.6	.1	.0	43	2.2	19.0	1.9	1.4	3.0	3.2	1.0	3.1	1.4	3.3					
E	.4	1.5	2.1	1.2	.1	.0	101	5.2	16.0	5.4	5.6	3.7	4.4	8.0	3.1	6.8	2.9					
ESE	.1	1.6	1.5	1.0	.1	.0	81	4.2	14.9	4.7	4.2	2.7	2.8	5.2	9.4	4.3	3.8					
SE	.4	1.5	1.2	.9	.2	.0	79	4.1	14.6	3.7	2.8	3.3	5.2	4.2	6.3	5.0	3.3					
SSE	.1	.8	1.2	.5	.1	.0	52	2.7	16.6	1.5	1.4	4.3	.8	3.1	6.3	4.6	1.4					
S	.7	2.1	1.9	.7	.1	.0	103	5.3	12.1	6.5	2.8	7.7	4.8	5.6	3.1	3.2	4.3					
SSW	.3	1.4	1.7	.6	.0	.0	78	4.0	13.4	5.0	4.2	1.7	5.6	2.8	4.7	5.3	3.3					
SW	.4	3.7	2.2	.8	.2	.1	139	7.2	13.0	8.8	4.2	6.7	9.2	5.6	6.3	5.7	7.6					
WSW	.3	2.5	2.9	.8	.2	.1	129	6.7	14.4	6.3	6.9	11.0	4.4	6.9	7.8	7.1	2.9					
W	.4	4.4	5.6	1.6	.9	.1	247	12.8	15.5	13.8	11.1	10.7	12.4	14.2	7.8	13.5	13.3					
WNW	.2	2.0	3.0	1.0	.2	.0	122	6.3	14.9	6.0	5.3	6.0	4.4	8.7	7.8	5.7	6.2					
NW	.8	3.1	4.3	.8	.3	.0	179	9.3	13.5	8.6	16.7	10.4	11.6	6.9	12.5	6.4	10.0					
NNW	.6	2.2	2.5	1.2	.0	.0	125	6.5	13.6	5.8	8.3	9.0	6.0	6.9	3.1	6.8	4.3					
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0					
CALM	3.7	661	716	297	51	3	72	3.7	.0	3.7	1.4	3.0	2.4	3.1	.0	4.6	8.1					
TOT OBS	199	34.3	37.2	15.4	2.6	.2	1927	100.0	13.8	464	72	299	249	288	64	281	210					
TOT PCT	10.3							100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0					

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)					
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD	00	03	06	09	12	15	18	21
N	3.2	5.2	4.1	1.3	.0	267	13.9	14.4	13.1	12.5	11.7	13.7	13.5	15.6	14.9	17.6
NE	2.5	2.1	2.6	.7	.0	153	7.9	13.9	7.1	9.7	8.0	12.0	5.2	6.3	6.0	11.0
E	1.9	3.4	3.3	.9	.0	182	9.4	15.5	10.1	9.7	6.4	7.2	13.2	12.5	11.0	6.7
SE	1.3	2.8	1.9	.7	.1	131	6.8	15.4	5.2	4.2	7.7	6.0	7.3	12.5	9.6	4.8
S	2.7	3.7	2.6	.4	.0	181	9.4	12.7	11.4	6.9	9.4	10.4	8.3	7.8	8.5	7.6
SW	2.4	7.7	2.6	1.0	.2	268	13.9	13.7	15.1	11.1	17.7	13.7	12.5	14.1	12.8	10.5
W	3.7	7.2	6.0	1.5	.3	359	19.1	15.3	19.8	19.4	16.7	16.9	22.9	15.6	19.2	19.5
NW	3.7	7.1	4.3	.6	.2	204	15.8	13.5	14.4	25.0	19.4	17.7	13.9	15.6	13.2	14.3
VAR	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
CALM	3.7	767	525	137	13	72	3.7	.0	3.7	1.4	3.0	2.4	3.1	.0	4.6	8.1
TOT OBS	485	39.8	27.2	137	13	1927	100.0	13.8	464	72	299	249	288	64	281	210
TOT PCT	25.2				.7				100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

SEPTEMBER

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	WIND SPEED (KNOTS)				PCT	
	1-3	4-10	11-21	22-33	34-47	TOTAL
00003	7.3	32.8	38.8	14.7	2.8	536
06009	8.8	36.5	32.3	17.5	2.0	548
12015	1.4	35.8	41.8	14.8	3.4	352
18021	7.1	32.4	37.5	14.3	2.6	491
TOT	127	661	716	297	51	1927
PCT	6.6	34.3	37.2	15.4	2.6	100.0

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION							MEAN CLOUD COVER
	0-2	3-4	5-7	8 & OBS	8 & OBS	TOTAL OBS		
N	.8	.6	2.0	6.2	126	6.9		
NNE	.1	.3	.5	3.6	58	7.4		
NE	.2	.1	1.8	3.1	69	7.0		
ENE	.1	.0	.2	2.0	30	7.7		
E	.2	.2	.6	4.8	75	7.6		
ESE	.0	.2	.6	3.9	61	7.7		
SE	.2	.2	.8	2.9	52	7.3		
SSE	.3	.2	.4	2.5	45	7.0		
S	.2	.3	.8	3.6	64	7.2		
SSW	.2	.2	1.4	1.7	46	6.7		
SW	.5	.3	1.9	3.2	77	6.6		
WSW	1.1	.7	2.9	3.5	107	6.1		
W	2.8	1.5	2.9	5.5	167	5.5		
WNW	1.0	.9	2.1	2.9	90	5.8		
NW	.7	.6	3.0	3.9	108	6.4		
NNW	.4	1.0	2.3	3.9	99	6.5		
VAR	.0	.0	.0	.0	0	.0		
CALM	.4	.3	1.0	1.5	42	6.1		
TOT OBS	117	98	330	771	1316	6.6		
TOT PCT	8.9	7.4	25.1	58.6	100.0			

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION														TOTAL OBS
	000	149	150	299	300	599	600	999	1000	2000	3500	5000	6500	8000+	
N	1.1	.0	.0	.0	.3	.1	1.1	.5	3.1	1.6	.1	.0	.2	.0	126
NNE	.6	.0	.0	.0	.1	.0	.5	.4	1.4	1.3	.0	.0	.0	.0	58
NE	.8	.0	.0	.0	.3	.0	.4	.4	1.6	1.1	.0	.0	.1	.0	69
ENE	.4	.0	.0	.0	.2	.0	.2	.2	.8	.5	.0	.0	.0	.0	30
E	1.1	.0	.0	.0	.2	.0	1.2	.2	1.5	.5	.3	.0	.1	.0	75
ESE	.9	.0	.0	.0	.1	.0	.3	.2	2.3	.5	.1	.0	.0	.0	61
SE	.4	.1	.1	.2	.2	.0	.2	.2	2.1	.4	.0	.0	.0	.0	52
SSE	.6	.1	.1	.0	.0	.0	.5	.5	.7	.5	.2	.1	.0	.0	45
S	.8	.0	.0	.0	.1	.0	.5	.4	1.6	1.0	.0	.0	.0	.1	64
SSW	.5	.0	.0	.0	.1	.0	.4	.4	1.1	.5	.0	.0	.0	.0	46
SW	.2	.0	.0	.0	.2	.0	.3	.3	2.5	.9	.2	.1	.1	.0	77
WSW	.3	.0	.0	.0	.2	.0	.3	.3	2.1	2.0	.1	.1	.1	.2	107
W	.9	.0	.0	.0	.2	.0	1.2	.2	2.3	2.2	.4	.1	.1	.0	167
WNW	.4	.0	.0	.0	.0	.0	1.1	.5	1.7	.7	.2	.0	.0	.1	90
NW	.5	.0	.0	.0	.1	.0	.5	.5	3.2	.6	.5	.2	.1	.0	108
NNW	.8	.0	.0	.0	.1	.0	.4	.4	2.2	1.4	.1	.1	.0	.0	95
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.1	.0	.0	.0	.0	.0	.1	.1	1.3	.3	.2	.0	.1	.1	42
TOT OBS	136	2	2	27	27	121	121	416	211	30	7	9	352	5	1316
TOT PCT	10.3	.2	.2	2.1	2.1	9.2	9.2	31.6	16.0	2.3	.5	.7	26.7	.4	100.0

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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NM >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)									
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0		
= OR >6500	.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
= OR >5000	.8	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
= OR >3500	1.7	3.4	3.9	3.9	3.9	3.9	4.0	4.0	4.0	4.0
= OR >2000	8.6	17.2	18.8	19.5	19.6	19.6	20.1	20.1	20.1	20.1
= OR >1000	17.7	41.6	48.2	50.3	51.1	51.5	52.1	52.1	52.1	52.1
= OR >600	20.2	47.3	55.7	58.8	60.0	60.6	61.4	61.4	61.4	61.4
= OR >300	20.5	48.3	57.2	60.4	61.6	62.5	63.5	63.5	63.5	63.5
= OR >150	20.6	48.5	57.4	60.6	61.8	62.6	63.6	63.6	63.6	63.6
= OR >0	20.6	49.2	59.1	63.9	65.7	70.0	72.7	73.0	73.0	73.0
TOTAL	269	642	772	834	858	914	949	954	954	954

TOTAL NUMBER OF OBS: 1306

PCT FREQ NH <5/8: 27.0

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8	DBSCD	TOTAL OBS
3.7	4.4	7.1	6.4	4.9	6.2	8.2	7.0	42.0	10.1	1366	

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.0	.1	.0	.1	.1	.4	.2	.1	.1	.2	.1	.0	.1	.0	.0	.1	.0	.0	23	1.7
NO PCP	.5	.1	.3	.2	.3	.3	.1	.4	.4	.4	.1	.4	.8	.3	.5	.4	.0	.1	78	5.7
TOTAL	7	4	4	4	5	9	5	7	6	8	4	6	12	4	7	8	0	1	101	7.3
1/2<1	.1	.2	.3	.1	.1	.1	.2	.3	.3	.0	.1	.0	.0	.0	.0	.0	.0	.0	26	1.9
NO PCP	.1	.0	.0	.0	.0	.1	.1	.1	.4	.0	.2	.1	.1	.0	.0	.0	.0	.0	15	1.1
TOTAL	3	3	4	1	2	2	4	5	9	0	5	1	2	0	0	0	0	0	41	3.0
1<2	.2	.2	.1	.2	.4	.4	.4	.1	.4	.2	.3	.1	.1	.1	.1	.1	.0	.1	50	3.6
NO PCP	.3	.1	.0	.0	.1	.1	.2	.1	.3	.0	.3	.3	.4	.2	.1	.1	.0	.0	35	2.5
TOTAL	7	4	2	3	6	6	9	4	10	3	8	5	7	4	2	3	0	2	85	6.2
2<5	.7	.3	.4	.3	1.1	.1	.3	.3	.3	.3	.6	.1	.4	.2	.1	.1	.0	.0	76	5.5
NO PCP	.7	.4	.3	.2	.1	.6	.3	.0	.7	.9	.7	.1	1.2	.2	.6	.1	.0	.2	102	7.4
TOTAL	20	10	9	7	17	10	8	4	13	17	18	2	21	6	10	3	0	3	178	12.9
5<10	.1	.4	.3	.3	.3	.2	.1	.3	.1	.2	.1	.3	.3	.1	.4	.2	.0	.0	52	3.8
NO PCP	3.2	1.4	1.8	.7	1.5	1.1	.8	.7	1.3	.9	1.7	3.0	4.0	2.1	2.8	2.8	.0	1.2	427	30.9
TOTAL	46	25	29	13	25	18	13	14	20	15	24	46	59	30	44	41	0	17	479	34.7
17+	.3	.1	.0	.0	.0	.1	.1	.0	.1	.0	.0	.0	.1	.1	.1	.1	.0	.0	15	1.1
NO PCP	3.4	1.2	1.7	.5	1.4	1.4	1.3	1.2	.9	.9	2.0	3.4	5.4	3.4	3.0	2.5	.0	1.2	481	34.9
TOTAL	51	17	23	7	19	21	19	17	14	13	27	47	76	48	44	37	0	16	496	35.9
TOTAL PCT	134 9.7	63 4.6	71 5.1	35 2.5	74 5.4	66 4.8	58 4.2	51 3.7	72 5.2	56 4.1	86 6.2	107 7.8	177 12.8	92 6.7	107 7.8	92 6.7	0 .0	39 2.6	1380 100.0	

SEPTEMBER

PERIOD: (PRIMARY) 1944-1969  
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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0	.0	.1	5	.3
	4-10	.1	.0	.2	.1	.2	.3	.0	.2	.1	.2	.2	.1	.1	.1	.0	.1	.0	.0	31	1.6
	11-21	.3	.1	.1	.0	.1	.2	.1	.1	.1	.2	.0	.1	.6	.2	.4	.2	.0	.0	48	2.5
	22+	.1	.2	.1	.2	.1	.1	.2	.0	.1	.1	.1	.2	.0	.0	.0	.2	.0	.0	27	1.4
	TOTAL	8	4	6	4	8	10	5	7	7	8	4	7	13	4	7	8	0	1	111	5.8
1/2<1	0-3	.1	.0	.0	.0	.1	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	.2
	4-10	.0	.1	.1	.1	.1	.1	.0	.0	.1	.1	.2	.0	.1	.0	.0	.0	.0	.0	12	.6
	11-21	.1	.0	.1	.0	.0	.0	.1	.3	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	13	.7
	22+	.0	.1	.2	.0	.0	.1	.1	.0	.3	.0	.1	.1	.1	.0	.0	.0	.0	.0	17	.9
	TOTAL	3	3	5	1	2	2	4	5	10	1	6	1	2	0	0	0	0	0	45	2.4
1<2	0-3	.1	.1	.1	.0	.0	.0	.1	.0	.1	.0	.0	.0	.0	.1	.1	.1	.0	.3	14	.7
	4-10	.1	.1	.1	.0	.1	.1	.4	.0	.3	.0	.4	.2	.3	.1	.1	.0	.0	.0	41	2.2
	11-21	.2	.1	.0	.1	.1	.0	.3	.2	.2	.0	.3	.1	.2	.1	.1	.0	.0	.0	28	1.5
	22+	.2	.1	.1	.1	.2	.3	.3	.1	.1	.2	.1	.1	.1	.1	.1	.1	.0	.0	37	1.9
	TOTAL	9	5	4	3	8	6	14	4	11	4	14	6	11	5	7	3	0	6	120	6.3
2<5	0-3	.1	.0	.1	.0	.0	.0	.0	.0	.1	.1	.2	.0	.1	.0	.0	.1	.0	.4	21	1.1
	4-10	.5	.1	.2	.1	.1	.3	.1	.1	.2	.3	.6	.2	.2	.2	.3	.1	.0	.0	62	3.3
	11-21	.4	.2	.3	.3	.4	.2	.2	.1	.5	.6	.2	.0	.7	.2	.4	.1	.0	.0	88	4.6
	22+	.5	.4	.3	.1	.5	.2	.2	.2	.1	.1	.4	.0	.4	.1	.2	.1	.0	.0	69	3.6
	TOTAL	28	12	16	8	19	12	9	5	17	21	26	4	25	10	16	5	0	7	240	12.6
5<10	0-3	.3	.1	.2	.1	.1	.0	.0	.0	.2	.1	.0	.2	.2	.0	.1	.2	.0	1.4	58	3.1
	4-10	1.4	.8	.8	.1	.6	.4	.4	.2	.8	.4	.8	1.1	1.5	.6	1.1	1.3	.0	.0	234	12.2
	11-21	1.3	.5	.3	.3	.8	.6	.2	.3	.7	.6	.8	.9	1.5	1.1	1.8	.9	.0	.0	241	12.7
	22+	.3	.7	.5	.5	.2	.2	.1	.3	.1	.2	.3	.5	1.1	.4	.3	.3	.0	.0	109	5.7
	TOTAL	60	39	35	17	31	24	14	14	34	22	37	53	83	39	61	52	0	27	642	33.8
10+	0-3	.5	.1	.6	.0	.3	.0	.3	.1	.2	.2	.2	.0	.1	.2	.6	.3	.0	1.6	96	5.0
	4-10	1.3	.6	1.0	.1	.4	.6	.5	.4	.6	.5	1.6	1.1	2.2	.9	1.6	.7	.0	.0	271	14.3
	11-21	1.6	.5	.4	.4	.6	.6	.7	.3	.4	.4	.8	1.6	2.7	1.4	1.6	1.3	.0	.0	288	15.1
	22+	.4	.1	.2	.0	.4	.2	.1	.2	.1	.1	.1	.3	.8	.7	.6	.6	.0	.0	88	4.6
	TOTAL	71	22	42	10	31	25	31	17	24	22	51	56	111	61	84	54	0	31	743	39.1
	TOTAL	179	85	108	43	99	79	77	52	103	78	138	127	245	119	175	122	0	72	1901	100.0
	PCT	9.4	4.5	5.7	2.3	5.2	4.2	4.1	2.7	5.4	4.1	7.3	6.7	12.9	6.3	9.2	6.4	.0	3.8	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8), AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	11.0	.3	2.5	9.6	30.7	18.9	2.0	.3	.6	.6	76.3	23.7	355
06009	8.7	.0	1.2	7.8	31.0	17.1	2.3	.6	.9	.6	70.1	29.9	345
12015	11.3	.0	2.6	7.6	29.1	12.3	2.0	1.0	.7	.7	67.2	32.8	302
18021	10.3	.3	1.8	11.2	34.8	14.8	2.7	.3	.6	.0	77.0	23.0	330
TOT	137	2	27	121	419	212	30	7	9	6	970	362	1332
PCT	10.3	.2	2.0	9.1	31.5	15.9	2.3	.5	.7	.5	72.8	27.2	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	8.0	1.7	5.7	9.5	36.4	38.7	349
06009	7.1	2.4	4.7	8.5	35.3	42.1	340
12015	6.5	2.4	4.1	12.6	38.8	35.7	294
18021	8.0	.9	4.6	13.0	37.5	35.9	323
TOT	97	24	63	141	482	499	1306
PCT	7.4	1.8	4.8	10.8	36.9	38.2	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET, NH >4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND5+	NH <5/8 AND 5+	TOTAL OBS
00003	10.3	15.5	33.5	43.6	22.9	349
06009	7.9	12.1	28.5	42.6	28.8	340
12015	10.9	17.0	33.0	36.4	30.6	294
18021	9.6	13.6	35.3	42.7	22.0	323
TOT	126	189	425	542	339	1306
PCT	9.6	14.5	32.5	41.5	26.0	100.0



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TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
60/64	.0	.0	.1	.2	.5	.7	.2	.0	22	1.7
55/59	.0	.0	.0	.5	.5	1.3	2.7	.7	74	5.8
50/54	.0	.0	.0	.1	1.6	2.4	11.8	9.2	322	25.1
45/49	.0	.0	.0	.2	1.4	7.3	16.4	33.0	747	58.3
40/44	.0	.0	.0	.0	.5	2.0	2.3	4.2	116	9.1
TOTAL	0	0	1	11	60	177	428	604	1281	100.0
PCT	.0	.0	.1	.9	4.7	13.8	33.4	47.2		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
60/64	.2	.0	.2	.0	.4	.2	.3	.5	.0	.0
55/59	.7	.3	.4	.3	1.1	.7	1.0	.9	.0	.4
50/54	2.3	2.0	1.8	1.7	2.2	5.2	4.8	3.7	.0	1.6
45/49	9.8	5.2	5.5	4.1	6.2	7.2	10.3	8.8	.0	1.2
40/44	1.2	.4	.5	.1	.4	.9	3.4	1.8	.0	.2
TOTAL	183	101	108	79	131	181	254	200	0	44
PCT	14.3	7.9	8.4	6.2	10.2	14.1	19.8	15.6	.0	3.4

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	64	61	58	49	45	43	41	49.5	507
06009	62	60	58	49	44	43	41	49.3	524
12015	57	56	52	46	43	41	41	46.6	322
18021	61	59	54	47	43	41	39	47.8	472
TOT	64	60	56	48	43	42	39	48.5	1825

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	2.1	7.1	13.2	31.5	46.0	87	378
06009	.0	.8	4.5	12.9	34.2	47.6	88	357
12015	.0	.0	3.0	9.4	39.6	48.0	89	202
18021	.0	.3	3.2	17.8	31.5	47.3	88	349
TOT	0	12	60	177	421	606	87	1286

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	37	41	45	49	53	57	61	TOT	W FOG	WD FOG
	40	44	48	52	56	60	64			
14/16	.0	.0	.0	.0	.2	.2	.1	5	.1	.3
11/13	.0	.0	.0	.4	.2	1.1	.0	22	.3	1.5
9/10	.0	.0	.0	.5	.6	1.0	.0	25	.2	1.8
7/8	.0	.0	.4	1.7	.7	.0	.0	34	.2	2.6
6	.0	.0	.4	1.1	.3	.0	.0	22	.2	1.6
5	.0	.0	1.0	3.0	.2	.1	.0	52	.6	3.7
4	.0	.2	3.2	3.4	.8	.0	.0	92	1.5	6.1
3	.0	.1	7.1	1.1	.4	.0	.0	107	1.4	7.4
2	.0	.5	9.5	2.4	.0	.0	.0	151	1.1	11.2
1	.0	.8	8.9	2.0	.4	.0	.0	148	1.7	10.4
0	.0	2.8	12.5	4.4	.1	.0	.0	241	2.8	17.0
-1	.0	2.0	7.5	1.3	.1	.0	.0	132	1.3	9.5
-2	.0	2.0	5.3	1.1	.0	.0	.0	102	.5	7.9
-3	.0	1.1	1.7	.5	.0	.0	.0	41	.2	3.2
-4	.1	.7	1.2	.2	.0	.0	.0	28	.1	2.2
-5	.0	.7	.3	.1	.0	.0	.0	13	.1	1.0
-6	.0	.1	.2	.0	.0	.0	.0	3	.0	.2
TOTAL	1	133	722	283	49	29	1	1218	149	1069
PCT	.1	10.9	59.3	23.2	4.0	2.4	.1	100.0	12.2	87.8

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N					NE					TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47			
<1	.4	.9	.0	.0	.0	.3	1.2	.0	.0	.0	10	.0	11
1-2	.0	2.3	1.4	.0	.0	.3	.7	.7	.0	.0	29	.0	12
3-4	.0	.9	3.1	.4	.0	.0	.8	1.0	.7	.0	34	.0	19
5-6	.0	.3	1.6	.4	.1	.0	.0	.8	.4	.0	18	.0	9
7	.0	.0	1.3	1.0	.1	.0	.0	.3	.5	.0	19	.0	6
8-9	.0	.0	.0	1.7	.0	.0	.0	.0	.3	.0	13	.0	2
10-11	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	3	.0	0
12	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	0	.0	2
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	3	34	57	30	2	4	20	21	15	1	126	0	61
PCT	.4	4.4	7.4	3.9	.3	.5	2.6	2.7	2.0	.1	16.4	.0	8.0

HGT	E					SE					TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47			
<1	.1	.5	.0	.0	.0	.0	1.4	.0	.0	.0	5	.0	11
1-2	.3	1.4	1.6	.0	.0	.0	.3	1.4	.0	.0	25	.0	13
3-4	.0	.7	1.6	.8	.0	.0	.5	1.4	.3	.0	23	.0	17
5-6	.0	.0	.9	.8	.0	.0	.1	.1	.0	.0	13	.0	2
7	.0	.0	.4	.5	.0	.0	.0	.3	.3	.1	7	.0	5
8-9	.0	.0	.0	.1	.0	.0	.0	.4	.5	.1	1	.0	8
10-11	.0	.0	.0	.3	.0	.0	.0	.0	.0	.1	2	.0	0
12	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	0	.0	2
13-16	.0	.0	.0	.0	.1	.0	.0	.0	.3	.0	1	.0	2
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	0
TOTAL	3	20	34	19	1	0	18	28	12	2	77	0	60
PCT	.4	2.6	4.4	2.5	.1	.0	2.3	3.7	1.6	.3	10.0	.0	7.8

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PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.1	.7	.0	.0	.0	.0	6	.1	.5	.0	.0	.0	.0	5
1-2	.1	1.2	.8	.0	.0	.0	16	.0	2.7	1.6	.1	.0	.0	34
3-4	.0	.4	1.4	.0	.0	.0	14	.1	1.3	2.7	.1	.0	.0	33
5-6	.0	.0	1.3	.5	.0	.0	14	.0	.3	1.7	.3	.0	.0	17
7	.0	.3	.0	.4	.0	.0	5	.0	.4	.5	.5	.0	.0	11
8-9	.0	.0	.0	.0	.0	.0	0	.0	.3	.0	.1	.0	.0	3
10-11	.0	.0	.0	.0	.0	.0	0	.0	.0	.1	.1	.0	.0	2
12	.0	.0	.1	.1	.0	.0	2	.0	.0	.0	.1	.0	.0	1
13-16	.0	.0	.0	.0	.0	.0	0	.0	.0	.1	.5	.1	.0	6
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	2	19	28	8	0	0	57	2	42	52	15	1	0	112
PCT	.3	2.5	3.7	1.0	.0	.0	7.4	.3	5.5	6.8	2.0	.1	.0	14.6

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	GRAND TOTAL
<1	.1	.5	.0	.0	.0	.0	5	.4	.9	.0	.0	.0	.0	10	63
1-2	.4	2.7	1.6	.0	.0	.0	36	.0	1.8	1.2	.0	.0	.0	23	188
3-4	.0	1.7	5.0	.0	.0	.0	51	.1	.7	3.4	.4	.0	.0	35	226
5-6	.0	.0	2.3	.7	.0	.0	23	.0	.0	1.6	1.0	.0	.0	20	116
7	.0	.0	1.3	1.2	.1	.0	20	.0	.1	1.6	.8	.0	.0	19	92
8-9	.0	.0	.0	.3	.0	.0	2	.0	.1	.1	.4	.0	.0	5	34
10-11	.0	.0	.5	.8	.0	.0	10	.0	.1	.4	.0	.1	.0	5	22
12	.0	.0	.1	.1	.0	.0	2	.0	.0	.0	.1	.0	.0	1	10
13-16	.0	.0	.1	.5	.0	.0	5	.0	.0	.0	.1	.0	.0	1	15
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.1	.0	1	0
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	0
TOTAL	4	38	84	27	1	0	154	4	29	63	22	2	0	120	767
PCT	.5	5.0	11.0	3.5	.1	.0	20.1	.5	3.8	8.2	2.9	.3	.0	15.6	100.0

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TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	5.4	6.4	.0	.0	.0	.0					94
1-2	1.1	12.6	9.8	.1	.0	.0					189
3-4	.4	6.6	18.9	2.5	.0	.0					227
5-6	.0	.6	9.9	3.9	.1	.0					116
7	.0	.8	5.4	5.0	.4	.0					92
8-9	.0	.4	.5	3.3	.1	.0					34
10-11	.0	.1	1.0	1.5	.1	.0					22
12	.0	.0	.3	1.9	.1	.0					10
13-16	.0	.0	.3	1.4	.3	.0					15
17-19	.0	.0	.0	.0	.1	.0					1
20-22	.0	.0	.0	.0	.0	.0					0
23-25	.0	.0	.0	.0	.0	.0					0
26-32	.0	.0	.0	.0	.0	.0					0
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	55	220	367	148	10	0					800
PCT	6.9	27.5	45.9	18.5	1.3	.0					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.2	16.5	12.5	3.1	2.1	.4	.5	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	372	3
6-7	.0	2.2	8.6	9.1	5.0	2.3	1.9	.6	.1	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	303	5
8-9	.0	.4	.5	2.8	4.6	2.6	2.0	.7	1.3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	151	7
10-11	.0	.0	.0	.0	.1	.9	.2	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	15	8
12-13	.0	.0	.0	.0	.2	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	9
>13	.0	.0	.0	.0	.1	.0	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4	9
INDET	16.4	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	168	0
TOTAL	179	195	219	152	123	62	48	19	16	3	0	0	0	0	0	0	0	0	0	1016	4
PCT	17.6	19.2	21.6	15.0	12.1	6.1	4.7	1.9	1.6	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

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TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA					TOTAL OBS
				FRZG PCPN	SNOW	OTHER FRZN PCPN					FOG WD PCPN	SMOKE HAZE	DUST BLWG	NO SIG WEA		
N	.2	.4	.2	.0	.1	.0	.0	.9	7	.0	.0	.0	.0	5.6	53	
NNE	.2	.4	.5	.0	.0	.0	.0	.9	7	.0	.0	.2	.0	2.1	26	
NE	.4	.1	.1	.0	.0	.0	.0	.6	5	.0	.5	.0	.0	1.6	22	
ENE	.4	.0	.1	.0	.0	.0	.0	.5	4	.0	.0	.0	.0	1.6	17	
E	1.7	.1	.1	.0	.0	.0	.0	2.0	16	.0	.0	.1	.0	2.8	40	
ESE	1.2	.2	.0	.0	.0	.0	.0	1.5	12	.0	.1	.0	.0	3.2	39	
SE	1.1	.0	.5	.0	.0	.0	.0	1.5	12	.0	.1	.0	.0	2.2	31	
SSE	.5	.0	.2	.0	.0	.0	.0	.7	6	.0	.0	.0	.0	2.2	24	
S	.7	.0	1.0	.0	.0	.0	.0	1.7	14	.0	.5	.1	.0	4.9	59	
SSW	1.2	.1	1.3	.0	.0	.0	.0	2.2	18	.0	.6	.0	.0	3.9	55	
SW	.9	.4	.7	.0	.0	.0	.0	2.0	16	.0	.0	.2	.0	5.9	66	
WSW	.6	.2	.4	.0	.1	.0	.0	1.2	10	.0	.2	.0	.0	4.7	50	
W	1.1	.6	.6	.0	.1	.0	.0	2.2	18	.0	.0	.1	.0	10.7	106	
WNW	.4	.0	.2	.0	.4	.0	.0	1.0	8	.0	.0	.0	.0	7.2	67	
NW	.9	.1	.5	.0	.0	.0	.1	1.6	13	.0	.1	.4	.0	7.8	81	
NNW	1.1	.1	.4	.0	.0	.0	.0	.6	5	.0	.1	.0	.0	5.1	48	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0	
CALM	.4	.1	.0	.0	.0	.0	.0	.5	4	.0	.0	.0	.0	3.4	32	
TOT OBS	98	24	57	0	6	0	1	175	175	0	19	10	0	612	816	
TOT PCT	12.0	2.9	7.0	.0	.7	.0	.1	21.4	100.0	.0	2.3	1.2	.0	75.0	100.0	

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN SHWR	DRZL PCPN	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT OB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA							TOTAL OBS
			FRZG PCPN	SNOW PCPN	OTHER FRZN PCPN					FOG WD PCPN	SMOKE HAZE	DUST BLWG SNOW	NO SIG WEA				
00003	14.4	7.2	.0	1.3	.0	.4	23.3	55	.0	3.0	.8	.0	72.9	236			
06009	8.5	6.3	.0	.9	.0	.0	19.6	44	.0	4.0	1.8	.0	74.6	224			
12015	11.3	5.2	.0	1.0	.0	.0	18.6	36	.0	2.6	.0	.0	78.9	194			
18021	11.2	8.4	.0	.9	.0	.0	20.9	45	.0	1.4	1.9	.0	75.8	215			
TOT	99	59	0	9	0	1	180	180	0	24	10	0	655	869			
PCT	11.4	6.8	.0	1.0	.0	.1	20.7	100.0	.0	2.8	1.2	.0	75.4	100.0			

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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-3	4-10	11-21	22-33	34-47	48+	TOTAL OBS	PCT FREQ	MEAN SPD		00	03	06	09	12
N	.2	2.7	2.8	.5	.2	.0	73	6.3	13.0		5.5	8.0	5.1	8.3	5.9
NNE	.3	1.1	.9	.3	.3	.0	35	3.0	15.0		2.9	8.0	3.4	3.0	2.2
NE	.0	1.6	1.1	1.0	.1	.0	43	3.7	15.4		2.6	4.0	3.4	7.5	3.8
ENE	.0	.9	.5	.4	.	.0	22	1.9	15.7		2.3	.0	1.1	1.5	1.6
E	.1	.6	1.7	.4	.3	.3	51	4.4	17.5		4.9	8.0	6.2	.8	4.3
ESE	.1	1.0	1.2	1.0	.3	.1	42	3.6	18.2		2.3	4.0	3.9	1.5	4.3
SE	.2	.9	1.6	.9	.6	.1	48	4.2	19.9		5.5	.0	2.8	5.3	4.9
SSE	.1	.7	1.0	.5	.1	.1	28	2.4	18.4		1.6	.0	1.1	1.5	4.3
S	.1	2.2	2.2	1.3	.3	.0	72	6.2	15.9		6.5	20.0	6.7	4.5	4.9
SSW	.3	1.4	2.9	1.5	.6	.0	77	6.7	18.4		6.2	8.0	9.0	9.0	4.9
SW	.6	1.9	3.7	1.6	.9	.0	100	8.7	17.4		8.8	4.0	9.6	10.5	9.7
WSW	.2	1.5	2.2	1.2	.3	.0	62	5.4	16.3		6.2	8.0	3.9	3.0	6.5
W	.8	3.4	5.3	3.0	.7	.3	152	13.1	16.8		14.3	4.0	14.0	9.8	11.9
WNW	.4	2.1	3.4	1.7	.8	.0	97	8.4	17.4		8.1	8.0	9.6	7.5	8.6
NW	1.0	5.2	4.3	2.0	.7	.0	152	13.1	14.0		14.6	.0	11.2	19.5	1.4
NNW	.4	1.6	2.4	1.0	.1	.0	64	5.5	15.1		4.9	16.0	5.1	3.8	7.0
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0		.0	.0	.0	.0	.0
CALM	3.3	342	430	212	73	6	38	3.3	.0		2.9	.0	3.9	3.0	3.8
TOT OBS	93	29.6	37.2	18.3	6.3	.5	1156	100.0	15.8		308	25	178	133	185
TOT PCT	8.0										100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD			00	03	06	09	12
N	2.2	4.6	1.8	.6	.1	108	9.3	13.6			8.4	14.0	8.4	11.3	8.1
NE	1.0	2.8	1.3	.5	.1	65	5.6	15.5			4.9	4.0	4.5	9.0	5.4
E	1.6	3.4	1.5	1.0	.6	93	8.0	17.8			7.1	12.0	10.1	2.3	8.6
SE	1.0	2.0	2.1	1.0	.4	76	6.6	19.4			7.1	.0	3.9	6.8	9.2
S	1.6	4.8	4.4	1.8	.2	149	12.9	17.2			12.7	28.0	15.7	13.5	9.7
SW	2.3	5.0	4.5	2.0	.2	162	14.0	17.0			14.9	12.0	13.5	13.5	16.2
W	3.6	8.1	6.0	3.5	.3	249	21.5	17.0			22.4	12.0	23.6	17.3	20.5
NW	4.2	8.1	4.3	2.0	.0	216	18.7	14.3			19.5	16.0	16.3	23.3	18.4
VAR	.0	.0	.0	.0	.0	0	.0	.0			.0	.0	.0	.0	.0
CALM	3.3	449	299	144	22	38	3.3	.0			2.9	.0	3.9	3.0	3.8
TOT OBS	242	38.8	25.9	12.5	1.9	1156	100.0	15.8			308	25	178	133	185
TOT PCT	20.9										100.0	100.0	100.0	100.0	100.0

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	1-3	4-10	11-21	22-33	34-47	48+	CALM	MEAN	PCT FREQ	TOTAL OBS
WIND SPEED (KNOTS)										
00003	3.9	30.9	37.2	17.7	6.9	.6	2.7	16.0	100.0	333
06009	7.4	31.5	34.1	16.7	6.8	.0	3.5	14.9	100.0	311
12015	.5	19.5	49.8	21.5	4.9	.5	3.4	17.2	100.0	205
18021	5.9	32.9	31.9	18.6	6.2	1.0	3.6	15.5	100.0	307
TOT	55	342	430	212	73	6	38	15.8		1156
PCT	4.8	29.6	37.2	18.3	6.3	.5	3.3		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WND DIR	BY WIND DIRECTION							TOTAL OBS	MEAN CLOUD COVER
	0-2	3-4	5-7	8-6	OBSCD	5-7	8-6		
N	.5	1.8	2.7	1.9				51	5.4
NNE	.0	.7	1.2	1.2				23	6.1
NE	.1	.3	.3	1.5				16	6.8
ENE	.0	.0	.5	1.5				15	7.5
E	.1	.3	.8	4.5				42	7.4
ESE	.3	.3	.4	3.7				34	7.3
SE	.0	.5	.5	2.3				25	7.0
SSE	.5	.7	.3	1.5				22	5.5
S	.3	.1	.1	4.9				51	7.2
SSW	.3	1.1	1.0	3.5				43	6.7
SW	.7	1.5	2.0	4.3				63	6.5
WSW	.4	.8	2.9	2.2				46	6.1
W	1.2	1.9	4.5	6.1				101	6.1
WNW	.8	1.8	2.3	3.0				58	5.8
NW	.8	1.8	2.9	4.2				71	6.0
NNW	.5	1.4	2.2	1.8				43	5.7
VAR	.0	.0	.0	.0				0	.0
CALM	.5	.7	.8	2.3				32	6.2
TOT OBS	53	114	198	371				736	6.3
TOT PCT	7.2	15.5	26.9	50.4				100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WND DIR	AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION										NH <5/8 ANY HGT	TOTAL OBS
	000	149	150	299	300	599	600	999	3500	5000	6500	
N	.1	.0	.0	.0	.0	.0	.5	.1	.5	.1	.3	51
NNE	.1	.0	.0	.0	.1	.0	.1	.1	.0	.0	.1	23
NE	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.1	16
ENE	.1	.0	.0	.0	.1	.0	.1	.1	.0	.0	.0	15
E	.0	.1	.1	.1	.1	.0	.3	.4	.8	.0	.1	42
ESE	.1	.1	.1	.1	.0	.0	.4	.1	.4	.0	.1	34
SE	.3	.0	.0	.0	.0	.0	.1	.0	.1	.0	.3	25
SSE	.0	.1	.1	.1	.0	.0	.0	.0	.0	.0	.4	22
S	.3	.0	.0	.0	.0	.0	.4	.0	.5	.0	.0	51
SSW	.4	.3	.0	.0	.0	.0	.5	.0	.3	.0	.0	43
SW	.1	.1	.0	.0	.0	.0	.3	.0	.1	.5	.0	63
WSW	.4	.1	.0	.0	.0	.0	.4	.0	.4	.0	.4	46
W	.0	.0	.0	.0	.1	.0	.7	.4	1.4	.5	.3	101
WNW	.0	.0	.0	.0	.0	.0	.1	.3	.3	.0	.3	58
NW	.0	.0	.0	.0	.0	.0	.3	.5	.5	.7	.1	71
NNW	.0	.0	.0	.0	.0	.0	.0	.4	.4	.1	.0	43
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.0	32
TOT OBS	15	3	3	3	7	1.0	4.3	32	47	17	19	736
TOT PCT	2.0	.4	.4	.4	1.0	1.2	2.6	2.3	6.4	2.3	2.6	100.0



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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NH)

CEILING (FEET)	= OR		= OR		= OR		= OR		= OR		= OR		= OR	
	>10		>5		>2		>1		>1/2		>1/4		>50YD	
= OR	1.6		3.1		3.6		3.6		3.6		3.6		3.6	
= OR	3.0		5.4		6.0		6.0		6.0		6.0		6.0	
= OR	5.8		10.6		11.5		11.9		11.9		12.1		12.1	
= OR	14.4		25.2		27.4		27.9		28.0		28.1		28.1	
= OR	31.9		50.3		56.4		58.5		60.2		60.4		60.7	
= OR	33.2		53.2		60.1		62.6		64.3		64.6		64.9	
= OR	33.2		54.0		61.0		63.6		65.2		65.5		65.8	
= OR	33.5		54.3		61.3		63.9		65.6		66.0		66.3	
= OR	33.6		54.6		61.6		64.5		66.1		66.7		67.1	
TOTAL	259		421		475		497		510		514		517	

TOTAL NUMBER OF OBS: 771

PCT FREQ NH <5/8: 32.9

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0		1		2		3		4		5		6		7		8		9		TOTAL	
	OBS		OBS		OBS		OBS		OBS		OBS		OBS		OBS		OBS		OBS		OBS	
1.6	3.3	8.8	10.1	8.0	6.6	11.3	6.4	41.2	2.6	808												

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.0	.0	.0	.1	.2	.2	.2	.0	.0	.1	.1	.0	.1	.1	.0	.0	.0	.0	.11	1.4
NO PCP	.0	.0	.0	.0	.0	.0	.1	.0	.1	.2	.1	.0	.0	.0	.0	.1	.0	.0	.6	.7
TOTAL	0	0	0	1	2	2	3	0	1	3	2	0	1	1	0	1	0	0	17	2.1
PCP	.0	.2	.0	.0	.1	.4	.2	.1	.1	.0	.4	.1	.1	.0	.2	.1	.0	.0	.18	2.2
NO PCP	.0	.0	.1	.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.4
TOTAL	0	2	1	0	2	4	2	1	1	0	3	1	1	0	2	1	0	0	21	2.6
PCP	.0	.0	.0	.1	.5	.2	.1	.1	.5	.5	.1	.1	.4	.1	.2	.1	.0	.0	.26	3.2
NO PCP	.0	.0	.1	.0	.1	.1	.0	.0	.2	.2	.1	.2	.2	.2	.0	.0	.0	.0	.14	1.7
TOTAL	0	0	1	1	5	3	1	1	6	6	2	3	5	3	2	1	0	0	40	5.0
PCP	.1	.1	.1	.1	.4	.1	.2	.1	.6	.9	.4	.2	.5	.6	.2	.0	.0	.1	.40	5.0
NO PCP	.1	.2	.1	.0	.0	.4	.2	.4	.7	.2	.5	.5	.7	.1	.6	.2	.0	.0	.42	5.2
TOTAL	2	3	2	1	3	4	4	4	11	9	7	6	10	6	7	2	0	1	82	10.1
PCP	.6	.5	.5	.1	.7	.4	.5	.4	.4	.5	.7	.7	1.0	.2	.1	.1	.0	.2	.63	7.8
NO PCP	1.4	.4	.9	1.2	2.0	.9	1.1	.6	1.4	1.4	1.6	.9	2.2	1.5	2.2	1.6	.0	.1	.172	21.3
TOTAL	16	7	11	11	22	10	13	8	14	15	19	13	26	14	19	14	0	3	235	29.1
PCP	.1	.0	.0	.0	.0	.1	.1	.0	.0	.2	.2	.0	.2	.0	.7	.4	.0	.1	.19	2.4
NO PCP	4.1	1.6	.9	.4	.7	1.7	.9	1.2	2.8	2.2	3.8	3.1	7.7	5.3	5.6	3.3	.0	3.3	394	48.8
TOTAL	34	13	7	3	6	15	8	10	2.8	20	33	25	64	43	51	30	0	28	413	51.1
TOTAL PCT	52 6.4	25 3.1	22 2.7	17 2.1	40 5.0	38 4.7	31 3.8	24 3.0	56 6.9	53 6.6	66 8.2	48 5.9	107 13.2	67 8.3	81 10.0	49 6.1	0	32 4.0	808 100.0	

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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0	3	.3
	4-10	.0	.0	.2	.1	.0	.0	.0	.1	.0	.2	.0	.0	.1	.1	.1	.0	.0	.0	9	.8
	11-21	.0	.0	.0	.0	.0	.0	.1	.0	.1	.1	.1	.0	.0	.0	.1	.1	.0	.0	6	.5
	22+	.0	.0	.0	.0	.1	.2	.2	.0	.0	.0	.1	.0	.1	.1	.1	.0	.0	.0	9	.8
	TOTAL	0	0	2	1	2	2	3	1	1	3	2	1	3	2	3	1	0	0	27	2.4
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	1	.1
	4-10	.0	.0	.0	.0	.0	.2	.0	.0	.1	.1	.2	.1	.0	.0	.1	.0	.0	.0	8	.7
	11-21	.1	.0	.1	.0	.0	.0	.2	.0	.1	.0	.2	.0	.0	.1	.0	.0	.0	.0	8	.7
	22+	.0	.2	.0	.0	.2	.2	.0	.1	.1	.2	.1	.1	.2	.0	.1	.1	.0	.0	16	1.4
	TOTAL	1	2	1	0	2	4	2	1	3	3	6	2	2	1	2	1	0	0	33	2.9
1<2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.0	.0	.2	.0	.1	.0	.0	.0	5	.4
	4-10	.0	.0	.1	.0	.1	.0	.1	.0	.3	.1	.3	.0	.1	.1	.1	.0	.0	.0	14	1.2
	11-21	.0	.0	.0	.0	.0	.2	.1	.0	.2	.3	.2	.0	.1	.0	.1	.1	.0	.0	13	1.1
	22+	.0	.0	.0	.1	.4	.1	.0	.1	.2	.2	.0	.2	.3	.3	.1	.0	.0	.0	20	1.8
	TOTAL	0	0	1	1	5	3	2	1	8	7	5	3	7	4	4	1	0	0	52	4.6
2<5	0-3	.0	.1	.0	.0	.0	.0	.0	.0	.0	.1	.0	.1	.1	.1	.2	.2	.0	.2	13	1.1
	4-10	.1	.2	.4	.1	.1	.0	.4	.0	.1	.2	.0	.0	.8	.4	.3	.0	.0	.0	34	3.0
	11-21	.1	.0	.0	.0	.2	.1	.0	.2	.6	.4	.4	.3	.3	.1	.2	.1	.0	.0	31	2.7
	22+	.1	.1	.2	.1	.1	.3	.4	.2	.3	.5	.4	.4	.3	.2	.5	.2	.0	.0	47	4.1
	TOTAL	3	4	7	2	4	4	9	4	11	13	11	8	16	9	13	5	0	2	125	11.0
5<10	0-3	.0	.1	.0	.0	.0	.0	.0	.1	.0	.1	.1	.0	.3	.3	.2	.2	.0	.5	20	1.8
	4-10	.5	.2	.6	.4	.8	.3	.1	.2	.7	.1	.7	.6	1.3	.2	.8	.4	.0	.0	89	7.8
	11-21	1.1	.2	.6	.4	1.2	.4	.4	.4	.4	.9	.8	.3	1.2	1.0	.9	.5	.0	.0	121	10.7
	22+	.3	.4	.5	.4	.3	.3	.8	.3	.4	.5	.7	.6	1.1	.4	.7	.5	.0	.0	90	7.9
	TOTAL	21	9	20	13	26	10	15	10	17	18	26	17	44	20	29	19	0	6	320	28.2
10+	0-3	.1	.2	.0	.0	.0	.1	.2	.0	.0	.1	.3	.0	.2	.1	.5	.1	.0	2.6	49	4.3
	4-10	2.0	.7	.2	.4	.6	.6	.4	.4	1.1	.8	.8	.6	1.1	1.3	4.0	1.1	.0	.0	182	16.0
	11-21	1.6	.7	.4	.1	.4	.4	.8	.4	.7	1.1	2.2	1.7	3.8	2.2	3.0	1.4	.0	.0	238	21.0
	22+	.4	.1	.4	.0	.1	.4	.2	.1	.7	.7	1.1	.3	1.9	1.7	1.2	.4	.0	.0	108	9.5
	TOTAL	46	19	11	5	12	17	17	10	28	31	50	29	80	60	99	34	0	29	577	50.9
	TOTAL	71	34	42	22	51	40	48	27	68	75	100	60	152	96	150	61	0	37	1134	100.0
	PCT	6.3	3.0	3.7	1.9	4.5	3.5	4.2	2.4	6.0	6.6	8.8	5.3	13.4	8.5	13.2	5.4	.0	3.3	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH > 4/8), AND  
OCCURRENCE OF NH < 5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH < 5/8 ANY HGT	TOTAL OBS
00003	2.7	.5	.5	5.0	29.9	15.4	4.1	2.3	3.2	2.3	65.6	34.4	221
06009	3.0	.0	1.5	4.5	31.3	17.9	5.0	2.0	2.0	.5	67.7	32.3	201
12015	3.4	.6	.6	2.8	28.4	14.2	6.8	1.1	4.0	.6	62.5	37.5	176
18021	1.0	1.0	1.0	3.7	37.7	15.2	8.4	3.7	.5	1.0	73.3	26.7	191
TOT	20	4	7	32	251	124	47	18	19	9	531	258	789
PCT	2.5	.5	.9	4.1	31.8	15.7	6.0	2.3	2.4	1.1	67.3	32.7	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NH) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.9	1.4	3.2	6.5	25.8	62.2	217
06009	.5	1.5	5.6	6.1	27.4	58.9	197
12015	1.8	1.8	1.8	12.0	27.5	55.1	167
18021	1.1	2.1	1.6	6.3	31.6	57.4	190
TOT	8	13	24	58	216	452	771
PCT	1.0	1.7	3.1	7.5	28.0	58.6	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NH) AND/OR  
CEILING HGT (FEET, NH > 4/8), BY HOUR

HOUR (GMT)	<150 CEILING	<600 HGT	<1000 AND 5+	1000+ AND 5+	NH < 5/8 AND 5+	TOTAL OBS
00003	1.4	4.1	16.6	48.8	34.6	217
06009	1.0	4.1	17.3	50.8	32.0	197
12015	.0	4.8	21.0	43.7	35.3	167
18021	1.1	5.3	16.3	57.4	26.3	190
TOT	7	35	136	388	247	771
PCT	.9	4.5	17.6	50.3	32.0	100.0

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TABLE 13

TEMP F	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP										TOTAL OBS	PCT FREQ
	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100				
55/59	.0	.0	.0	.4	.2	.2	.0	.0			4	.7
50/54	.0	.0	.0	.5	1.5	1.6	2.0	2.2			43	7.6
45/49	.0	.0	.2	.7	3.3	11.4	16.7	20.3			290	52.6
40/44	.0	.0	.0	.5	3.8	6.7	10.9	13.1			193	35.0
35/39	.0	.0	.0	.0	.4	.7	1.1	1.6			21	3.8
TOTAL	0	0	1	12	50	114	169	205			551	100.0
PCT	.0	.0	.2	2.2	9.1	20.7	30.7	37.2				

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP											VAR	CALM
N	NE	E	SE	S	SW	W	NW					
.0	.0	.0	.0	.0	.0	.7	.0				.0	.0
.2	.5	.0	.4	1.1	2.4	2.2	.9				.0	.2
3.6	4.2	2.9	2.7	8.5	10.5	11.3	8.5				.0	.4
4.7	1.6	2.0	2.9	4.9	4.7	6.5	6.7				.0	.9
.9	.0	.0	.4	.0	.2	1.3	1.1				.0	.0
52	35	27	35	80	98	121	95				0	8
9.4	6.4	4.9	6.4	14.5	17.8	22.0	17.2				.0	1.5

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR										TOTAL OBS
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN		
00003	57	55	52	46	40	36	36	45.7		335
06009	54	52	50	45	40	37	35	44.5		317
12015	52	50	48	43	37	36	36	43.3		210
18021	54	53	50	44	37	36	36	43.9		321
TOT	57	54	50	45	39	36	35	44.5		1183

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR										TOTAL OBS
HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100	MEAN			
00003	.0	3.4	13.5	18.5	25.8	38.8	83			178
06009	.0	2.6	8.3	19.9	31.4	37.8	65			156
12015	.0	1.6	4.8	22.6	41.9	29.0	84			62
18021	.0	1.2	6.8	24.8	30.4	36.6	85			161
TOT	0	13	51	118	170	205	84			557

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	33	37	41	45	49	53	57	TOT	W FOG	MO FOG
11/13	.0	.0	.0	.0	.0	.1	.0	1	.0	.1
9/10	.0	.0	.0	.0	1.4	.3	.0	12	.0	1.7
7/8	.0	.0	.0	.0	2.9	.1	.3	24	.0	3.3
6	.0	.0	.0	.1	.3	.1	.)	4	.0	.6
5	.0	.0	.1	1.8	.8	.3	.0	22	.0	3.0
4	.0	.0	.4	4.4	.3	.0	.0	37	.1	5.0
3	.0	.0	.8	5.1	1.0	.1	.0	51	.3	6.8
2	.0	.0	3.4	8.8	.3	.0	.0	91	.6	12.0
1	.0	.6	5.8	4.7	.3	.0	.0	82	.7	10.6
0	.0	.4	6.8	7.7	.7	.0	.0	113	.4	15.2
-1	.0	.8	6.1	3.3	.4	.0	.0	77	.1	10.5
-2	.0	1.5	7.0	1.4	.0	.0	.0	72	.1	9.8
-3	.0	.7	2.1	.3	.0	.0	.0	22	.0	3.0
-4	.0	1.9	3.3	1.2	.0	.0	.0	47	.0	6.5
-5	.1	2.3	1.2	.6	.0	.0	.0	31	.0	4.3
-6	.0	.4	1.0	.0	.0	.0	.0	10	.1	1.2
-7/-8	1.1	1.5	.0	.0	.0	.0	.0	19	.0	2.6
-9/-10	.3	.0	.6	.0	.0	.0	.0	6	.0	.8
-11/-13	.0	.4	.1	.0	.0	.0	.0	4	.0	.6
TOTAL	11	77	281	286	60	8	2	725	18	707
PCT	1.5	10.6	38.8	39.4	8.3	1.1	.3	100.0	2.5	97.5

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N										NE										48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL								
<1	.3	.3	.0	.0	.0	.0	2	.0	.0	.0	.0	.0	.0	0								
1-2	.0	2.2	.3	.0	.0	.0	8	.0	.3	.9	.0	.0	.0	4								
3-4	.0	1.2	1.2	.0	.0	.0	8	.0	.0	.6	.0	.0	.0	2								
5-6	.0	.0	.6	.0	.0	.0	2	.0	.0	1.2	.0	.0	.0	4								
7	.0	.0	1.6	.3	.0	.0	6	.0	.0	.0	.9	.0	.0	3								
8-9	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
10-11	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
13-16	.0	.0	.0	.0	.3	.0	1	.0	.0	.0	.0	.3	.0	1								
17-19	.0	.0	.0	.3	.0	.0	1	.0	.0	.0	.0	.0	.0	0								
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
TOTAL	1	12	12	2	1	0	28	0	1	9	3	1	0	14								
PCT	.3	3.7	3.7	.6	.3	.0	8.7	.0	.3	2.8	.9	.3	.0	4.3								

HGT	E										SE										48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL								
<1	.0	.0	.0	.0	.0	.0	0	.0	.9	.0	.0	.0	.0	3								
1-2	.3	3.7	1.9	.0	.0	.0	19	.0	.9	1.2	.0	.0	.0	7								
3-4	.0	.6	1.2	.6	.0	.0	8	.0	.0	1.6	.0	.0	.0	5								
5-6	.0	.0	.3	.3	.0	.0	2	.0	.0	.3	.6	.6	.0	5								
7	.0	.0	.0	.3	.0	.0	1	.0	.0	.0	.0	.0	.0	0								
8-9	.0	.0	.3	.3	.0	.0	2	.0	.0	.3	.6	.0	.0	3								
10-11	.0	.0	.0	.0	.6	.0	2	.0	.0	.0	.0	.0	.0	1								
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.3	.0	.0	1								
13-16	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.6	.6	.0	4								
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
20-22	.0	.0	.3	.0	.3	.0	2	.0	.0	.0	.0	.0	.0	0								
23-25	.0	.0	.0	.0	.3	.0	1	.0	.0	.0	.0	.0	.0	0								
26-32	.0	.0	.0	.0	.3	.0	1	.0	.0	.0	.0	.0	.0	0								
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0								
TOTAL	1	14	13	5	5	0	38	0	.6	11	7	.0	.0	29								
PCT	.3	4.3	4.0	1.6	1.6	.0	11.8	.0	1.9	3.4	2.2	.9	.6	9.0								

PC: FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S							SW							48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47				
<1	.0	.6	.0	.0	.0	.0	2	.3	.6	.0	.0	.0	.0	.0		
1-2	.0	2.2	3.1	.0	.0	.0	17	.0	.6	2.5	.0	.0	.0	10		
3-4	.0	.0	1.9	.3	.0	.0	7	.0	.3	.9	.0	.0	.0	4		
5-6	.0	.0	1.6	.9	.0	.0	8	.0	.0	.3	.9	.3	.0	5		
7	.0	.0	.6	1.2	.0	.0	6	.0	.0	.6	.9	.0	.0	5		
8-9	.0	.0	.0	.3	.0	.0	1	.0	.0	.0	.3	.3	.0	2		
10-11	.0	.0	.6	.3	.0	.0	3	.0	.0	.9	.6	.3	.0	6		
12	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
13-16	.0	.0	.3	.0	.0	.0	1	.0	.0	.0	.0	.0	.0	3		
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.3	.0	1		
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.3	.0	.0	1		
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0		
TOTAL	0	9	26	10	0	0	45	1	5	20	10	4	0	40		
PCT	.0	2.8	8.1	3.1	.0	.0	14.0	.3	1.6	6.2	3.1	1.2	.0	12.4		

HGT	W							NW							48+	TOTAL	GRAND TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47					
<1	.0	.6	.0	.0	.0	.0	2	.0	.0	.0	.0	.0	.0	.0	0	12	
1-2	.0	.9	3.4	.0	.0	.0	14	.3	2.8	2.5	.0	.0	.0	.0	18	97	
3-4	.0	.3	2.8	.3	.0	.0	11	.0	.3	3.1	.6	.0	.0	.0	13	58	
5-6	.0	.3	2.2	1.2	.0	.0	12	.0	.3	2.2	.6	.0	.0	.0	10	48	
7	.0	.0	.6	1.9	.0	.0	8	.0	.0	.0	.3	.0	.0	.0	1	30	
8-9	.0	.0	.3	.3	.0	.0	2	.0	.0	.3	.9	.3	.0	.0	5	15	
10-11	.0	.0	2.8	1.2	.3	.0	14	.0	.0	1.2	.9	.0	.0	.0	7	33	
12	.0	.0	.3	.0	.0	.0	1	.0	.0	.0	.0	.0	.0	.0	2	15	
13-16	.0	.0	.0	.9	.0	.0	3	.0	.0	.0	.3	.3	.0	.0	2	15	
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	2	
20-22	.0	.0	.0	.3	.0	.0	1	.0	.0	.0	.0	.0	.0	.0	0	3	
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.3	.3	.0	1	3	
26-32	.0	.0	.0	.0	.9	.0	3	.0	.0	.0	.0	.0	.0	.0	0	4	
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	0	
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	0	
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	0	
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	0	
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	0	
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	0	
TOTAL	0	7	40	20	4	0	71	1	11	30	12	3	0	57	322	0	
PCT	.0	2.2	12.4	6.2	1.2	.0	22.0	.3	3.4	9.3	3.7	.9	.0	17.7	100.0	0	



OCTOBER

PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1969

AREA 0010 ATTU  
51-55N 172-180E

TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)						TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+	
<1	9.0	2.8	.0	.0	.0	.0	42
1-2	1.1	12.4	14.4	.0	.0	.0	99
3-4	.0	2.5	12.1	1.7	.0	.0	58
5-6	.0	.6	7.9	4.2	.8	.0	48
7	.0	.0	3.1	5.4	.0	.0	30
8-9	.0	.0	1.1	2.5	.6	.0	15
10-11	.0	.0	5.1	2.8	1.1	.3	33
12	.0	.0	.3	.3	.0	.0	2
13-16	.0	.0	1.1	1.7	1.1	.3	15
17-19	.0	.0	.0	.3	.3	.0	2
20-22	.0	.0	.3	.3	.3	.0	3
23-25	.0	.0	.0	.3	.6	.0	3
26-32	.0	.0	.0	.0	1.1	.0	4
33-40	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0
TOTAL	36	65	161	69	21	2	354
PCT	10.2	18.4	45.5	19.5	5.9	.6	100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.8	19.2	7.5	3.4	2.2	.8	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	202	3
6-7	.0	.8	3.6	5.4	2.0	1.4	1.9	.5	.7	.3	.5	.5	.3	.0	.0	.0	.0	.0	.0	105	7
8-9	.0	1.2	2.5	.7	2.2	1.0	5.1	.8	1.9	.2	.0	.0	.3	.0	.0	.0	.0	.0	.0	94	8
10-11	.0	.0	.3	.2	.0	.2	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	8	9
12-13	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1	13
>13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	
INDET	30.2	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	179	0
TOTAL	183	125	82	58	38	20	43	7	20	3	3	3	4	.0	.0	.0	.0	.0	.0	589	3
PCT	31.1	21.2	13.9	9.8	6.5	3.4	7.3	1.2	3.4	.5	.5	.5	.7	.0	.0	.0	.0	.0	.0	100.0	

NOVEMBER

PERIOD: (PRIMARY) 1945-1960  
(OVER-ALL) 1901-1968

AREA 0010 ATTU  
51-55N 172-180E

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
			DRZL	FRZG	SNOW	OTHER				PCPN	FOG	SMOKE	DUST	
			PCPN	PCPN	PCPN	PCPN				NO	BLWG	DUST	SIG	
										WEA				
N	.3	.0	.4	.0	.4	.0	.0	6	.0	.4	.0	.0	3.1	30
NNE	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	1.0	7
NE	.0	.0	.0	.0	.1	.0	.0	1	.0	.1	.0	.0	2.1	16
ENE	1.2	.0	.3	.0	.4	.0	.0	13	.0	.0	.0	.0	.9	19
E	.6	.0	.7	.0	.4	.0	.0	11	.0	.1	.0	.0	2.1	26
ESE	.6	.0	.9	.0	.4	.0	.0	12	.0	.0	.0	.0	1.0	19
SE	.6	.0	.6	.0	.3	.0	.0	10	.0	.1	.0	.0	1.8	23
SSE	1.0	.3	.3	.0	.1	.0	.0	11	.0	.1	.0	.1	2.3	29
S	1.3	.3	1.3	.0	.6	.0	.1	24	.0	.1	.0	.0	6.0	67
SSW	1.2	.1	1.0	.0	.3	.0	.0	16	.0	.1	.0	.0	3.5	43
SW	.7	.1	.4	.0	.7	.0	.0	14	.0	.4	.0	.0	7.5	68
WSW	.7	.1	.4	.0	1.2	.0	.0	14	.0	.0	.0	.0	8.7	73
W	.6	1.0	.9	.0	2.3	.0	.1	30	.0	.1	.1	.0	14.1	128
WNW	.3	.0	.0	.0	1.2	.0	.0	9	.0	.0	.0	.0	5.0	43
NW	.6	.3	.3	.0	2.1	.0	.0	19	.0	.1	.0	.0	5.1	55
NNW	.3	.4	1.1	.0	.3	.0	.0	7	.0	.0	.0	.0	3.2	30
VAR	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
CAIM	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.7	5
TOT OBS	68	19	53	0	75	0	2	197	0	14	5	1	464	681
TOT PCT	10.0	2.8	7.8	.0	11.0	.0	.3	28.9	.0	2.1	.7	.1	68.1	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	PRECIPITATION TYPE			HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
			DRZL	FRZG	SNOW	OTHER				PCPN	FOG	SMOKE	DUST	
			PCPN	PCPN	PCPN	PCPN				NO	BLWG	DUST	SIG	
										WEA				
00003	9.9	1.0	7.3	.0	16.8	.0	.0	59	.0	3.1	.5	.0	65.4	191
06009	10.6	5.0	8.9	.0	8.3	.0	1.1	57	.0	2.2	.6	.6	65.0	180
12015	6.7	2.7	4.0	.0	9.3	.0	.0	29	.0	1.3	.7	.0	78.7	150
18021	12.2	3.5	9.9	.0	9.9	.0	.0	56	.0	1.2	1.2	.0	65.1	172
TOT	69	21	53	0	78	0	2	201	0	14	5	1	472	693
PCT	10.0	3.0	7.6	.0	11.3	.0	.3	29.0	.0	2.0	.7	.1	68.1	100.0

NOVEMBER

PERIOD: (PRIMARY) 1945-1968  
(OVER-ALL) 1901-1968

AREA 0010 ATTU  
51-55N 172-180E

TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)					
	0-3	4-10	11-21	22-33	34-47	48+	TOTAL OBS	PCT FREQ	MEAN SPD		00	03	06	09	12	15
N	.0	.8	2.0	1.0	.6	.1	44	4.6	21.4		6.5	14.3	1.9	3.0	5.4	.0
NNE	.0	.6	.8	.3	.0	.0	17	1.8	14.6		2.3	.0	1.3	3.0	.0	.0
NE	.1	.7	.9	.7	.3	.0	27	2.8	19.6		2.7	.0	1.9	4.0	3.6	.0
ENE	.0	.0	.6	.5	1.1	.2	24	2.5	33.0		1.5	14.3	1.9	5.0	1.8	.0
E	.0	.4	2.4	1.7	.8	.0	51	5.3	22.1		5.7	.0	3.2	5.9	4.2	18.2
ESE	.0	.5	.9	.8	.5	.1	28	2.9	24.2		2.7	14.3	.6	6.9	2.4	.0
SE	.5	1.0	1.8	1.5	.5	.2	53	5.5	19.5		6.9	.0	6.5	9.9	4.2	9.1
SSE	.0	.6	1.5	.9	.8	.1	38	4.0	23.5		3.4	.0	2.6	2.0	6.6	.0
S	.1	.9	3.9	1.8	1.5	.4	82	8.5	23.9		9.2	.0	13.6	5.9	5.4	.0
SSW	.1	1.3	2.5	1.1	.7	.0	55	5.7	19.0		4.6	.0	3.2	5.9	6.0	27.3
SW	.3	2.4	3.3	2.8	.8	.0	95	9.9	18.6		8.8	.0	10.4	9.9	9.6	9.1
WSW	.5	1.7	4.1	2.3	1.0	.3	95	9.9	19.8		12.3	35.7	7.8	6.9	11.4	.0
W	1.0	2.9	7.8	3.2	1.6	.2	161	16.8	19.1		15.7	21.4	22.1	9.9	19.9	.0
WNW	.4	1.6	2.8	1.6	.6	.1	68	7.1	18.7		7.3	.0	7.1	6.9	7.8	9.1
NW	.5	1.6	4.1	1.6	.3	.0	77	8.0	16.5		7.7	.0	9.1	10.9	6.0	27.3
NNW	.2	.8	2.0	.9	.2	.0	40	4.2	17.8		2.3	.0	5.8	4.0	4.2	.0
VAR	.0	.0	.0	.0	.0	.0	0	.0	.0		.0	.0	.0	.0	.0	.0
CALM	.5	174	397	219	111	17	960	.5	20.0		.4	.0	.6	.0	1.2	.0
TOT OBS	42	18.1	41.4	22.8	11.6	1.8	960	100.0			261	14	154	101	166	11
TOT PCT	4.4										100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)					
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD			00	03	06	09	12	15
N	.3	2.5	2.4	.7	.4	61	6.4	19.5			8.8	14.3	3.2	5.9	5.4	.0
NE	.2	1.1	1.9	1.0	1.0	51	5.3	25.9			4.2	4.3	3.9	6.9	5.4	.0
E	.2	2.8	2.4	2.4	.4	79	8.2	22.8			8.4	14.3	3.9	12.9	6.6	18.2
SE	1.3	3.0	2.3	2.3	.6	91	9.5	21.2			10.3	.0	9.1	11.9	10.8	9.1
S	1.1	3.9	5.2	3.1	.9	137	14.3	21.9			13.8	.0	16.9	11.9	11.4	27.3
SW	2.8	6.9	5.7	3.3	1.0	190	19.8	19.2			21.1	35.7	18.2	16.8	21.1	9.1
W	2.9	7.7	8.0	4.3	.9	229	23.9	19.0			23.0	21.4	29.2	16.8	27.7	9.1
NW	1.6	4.3	5.3	.9	.1	117	12.2	17.0			10.0	.0	14.9	14.9	10.2	27.3
VAR	.0	.0	.0	.0	.0	0	.0	.0			.0	.0	.0	.0	.0	.0
CALM	.5	309	319	174	53	960	.5	20.0			.4	.0	.6	.0	1.2	.0
TOT OBS	105	32.2	33.2	18.1	5.5	960	100.0				261	14	154	101	166	11
TOT PCT	10.9										100.0	100.0	100.0	100.0	100.0	100.0

NOVEMBER

PERIOD: (PRIMARY) 1945-1968  
(OVER-ALL) 1901-1968

AREA 0010 ATTU  
51-55N 172-180E

TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	1-3	4-10	11-21	22-33	34-47	48+	CALM	MEAN	PCT FREQ	TOTAL OBS
00003	4.4	18.5	38.9	24.0	11.6	2.2	.4	20.3	100.0	275
06009	4.7	16.5	45.1	22.4	8.2	2.7	.4	19.6	100.0	255
12015	2.3	15.3	41.2	23.7	14.7	1.7	1.1	21.2	100.0	177
18021	2.6	21.3	40.3	21.3	12.6	.4	.4	19.4	100.0	253
TOT	37	174	397	219	111	17	5	20.0		960
PCT	3.9	18.1	41.4	22.8	11.6	1.8	.5		100.0	

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

BY WIND DIRECTION

WIND DIR	0-2	3-4	5-7	8 &	OBSCD	TOTAL OBS	MEAN CLOUD COVER
N	.3	.5	1.4	3.0	30	30	6.6
NNE	.3	.2	.5	.3	8	8	5.1
NE	.3	.0	.2	1.7	13	13	6.6
ENE	.0	.0	.2	1.9	12	12	7.9
E	.0	.0	.5	3.3	22	22	7.7
ESE	.0	.0	.3	2.1	14	14	7.8
SE	.2	.0	1.0	3.8	29	29	7.3
SSE	.3	.0	.9	1.9	18	18	6.7
S	.2	.0	2.3	7.1	55	55	7.4
SSW	.7	.2	1.2	2.6	27	27	6.3
SW	1.2	1.7	1.7	5.2	57	57	6.1
WSW	1.4	.9	4.7	3.7	61	61	5.8
W	2.1	2.4	7.1	8.4	115	115	6.1
WNW	.7	.5	2.8	2.8	39	39	6.1
NW	.7	.9	4.7	1.6	45	45	5.8
NNW	.3	.5	1.7	1.6	24	24	6.1
VAR	.0	.0	.0	.0	0	0	.0
CALM	.0	.0	.3	.5	5	5	7.0
TOT OBS	51	45	182	296	574	574	6.4
TOT PCT	8.9	7.8	31.7	51.6	100.0	100.0	

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8 ANY HGT	TOTAL OBS
N	.2	.2	.9	.5	.9	.5	.9	.0	.0	.0	1.2	30
NNE	.0	.0	.0	.2	.3	.2	.2	.0	.0	.0	.5	8
NE	.0	.0	.0	.0	.9	.9	.2	.0	.0	.0	.3	13
ENE	.3	.0	.7	.3	.3	.3	.0	.0	.0	.0	.0	12
E	.2	.0	.0	.3	1.9	1.2	.0	.0	.0	.0	.2	22
ESE	.0	.0	.0	.3	1.0	.3	.0	.0	.0	.0	.5	14
SE	.3	.0	.0	.3	1.2	.5	.3	.0	.0	1.2	1.0	29
SSE	.0	.0	.0	.0	1.2	.9	.2	.2	.0	.3	.3	18
S	.5	.2	.2	.2	2.1	2.8	2.4	.2	.3	.2	.5	55
SSW	.0	.2	.0	.2	1.6	.7	.9	.3	.0	.0	.9	27
SW	.9	.2	.0	.2	2.8	.3	1.0	.5	.7	.2	3.1	57
WSW	.0	.0	.2	.5	2.4	1.7	1.7	.3	.5	.2	3.0	61
W	.2	.0	.0	1.0	5.9	3.8	2.1	.3	1.4	.2	5.2	115
WNW	.2	.0	.3	.7	2.1	1.2	.5	.0	.0	.0	1.7	39
NW	.0	.0	.0	.5	2.3	1.7	1.0	.2	.2	.0	1.9	45
NNW	.2	.0	.0	.3	.9	.9	.3	.2	.0	.2	1.2	24
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
CALM	.0	.0	.0	.0	.2	.2	.0	.0	.0	.0	.5	5
TOT OBS	16	4	13	33	161	105	68	13	18	15	128	574
TOT PCT	2.8	.7	2.3	5.7	28.0	18.3	11.8	2.3	3.1	2.6	22.3	100.0

PERIOD: (PRIMARY) 1945-1968  
(OVER-ALL) 1901-1968

NOVEMBER

AREA 0010 ATTU  
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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	VSBY (NM)									
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0		
= OR >6500	3.4	5.2	5.9	5.9	6.0	6.0	6.0	6.0		
= OR >5000	4.6	7.4	8.3	8.3	8.4	8.4	8.4	8.4		
= OR >3500	8.8	16.7	20.0	20.0	20.3	20.5	20.5	20.5		
= OR >2000	13.1	33.4	37.5	38.0	38.5	38.7	38.7	38.7		
= OR >1000	18.6	54.0	63.2	64.2	65.6	66.1	66.4	66.4		
= OR >600	21.5	58.3	68.0	69.5	71.1	71.6	72.1	72.1		
= OR >300	21.9	59.2	69.5	71.3	73.0	73.5	74.2	74.2		
= OR >150	22.2	59.9	70.2	71.9	73.7	74.2	74.9	74.9		
= OR > 0	22.2	60.2	71.3	73.5	75.7	76.6	77.3	77.5		
TOTAL	129	350	414	427	440	445	449	450		

TOTAL NUMBER OF OBS: 581

PCT FREQ NH <5/8: 22.5

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

										TOTAL
										DBS
0	1	2	3	4	5	6	7	8		
3.6	.5	7.2	3.9	6.9	10.1	13.2	7.0	45.0	2.6	613

NOVEMBER

PERIOD: (PRIMARY) 1945-1968  
(OVER-ALL) 1901-1968

AREA 0010 ATTU  
51-55N 172-180E

TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
BASED ON VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.0	.0	.0	.0	.1	.1	.0	.0	.1	.0	.1	.0	.1	.4	.3	.0	.0	11	1.6
NO PCP	.0	.0	.1	.0	.0	.0	.0	.0	.3	.0	.1	.1	.0	.0	.1	.0	.0	6	.9
TOTAL	0	0	1	0	1	1	0	0	3	1	1	1	1	3	3	0	0	17	2.5
PCP	.1	.0	.0	.1	.3	.1	.1	.1	.4	.3	.6	.4	.3	.0	.0	.0	.0	23	3.4
NO PCP	.0	.0	.0	.0	.0	.0	.0	.1	.0	.1	.1	.3	.1	.0	.0	.0	.0	6	.9
TOTAL	1	0	0	1	2	1	1	2	3	3	5	5	3	0	0	0	0	29	4.2
PCP	.1	.0	.0	.7	.4	.4	.3	.1	.7	.4	.3	.4	.1	.4	.1	.0	.0	34	5.0
NO PCP	.3	.0	.0	.0	.0	.0	.1	.1	.1	.0	.1	.0	.0	.1	.0	.0	.0	7	1.0
TOTAL	3	0	0	5	3	3	3	2	6	3	3	3	1	4	1	0	0	41	6.0
PCP	.3	.0	.0	.7	.4	.6	.4	1.0	.7	1.0	.6	.3	.3	.4	.1	.0	.0	52	7.6
NO PCP	.4	.0	.3	.0	.4	.1	.3	.7	.8	.7	.7	1.0	.3	.1	.1	.0	.0	53	7.8
TOTAL	5	0	2	5	6	5	5	12	17	12	9	9	4	4	2	0	0	105	15.4
PCP	.3	.0	.1	.3	.1	.4	.6	.3	1.5	.4	.6	2.9	.3	1.2	.4	.0	.0	71	10.4
NO PCP	1.2	.6	1.0	.6	1.3	.4	1.0	1.3	3.5	2.2	4.0	8.1	1.9	2.9	1.0	.0	.3	250	36.6
TOTAL	10	4	8	6	10	6	11	11	34	18	31	75	15	28	10	0	2	321	47.0
PCP	.0	.0	.0	.0	.1	.0	.0	.0	.1	.0	.0	.6	.0	.3	.1	.0	.0	9	1.3
NO PCP	1.6	.4	.7	.3	.4	.4	.4	.3	.6	.9	2.6	4.8	2.6	2.0	2.0	.0	.4	161	23.6
TOTAL	11	3	5	2	4	3	3	2	5	6	18	37	18	16	15	0	3	170	24.9
TOTAL	30	7	16	19	26	19	23	29	68	43	67	130	42	55	31	0	5	263	100.0
PCT	4.4	1.0	2.3	2.6	3.8	2.8	3.4	4.2	10.0	6.3	9.8	19.0	6.1	8.1	4.5	.0	.7	100.0	

NOVEMBER

PERIOD: (PRIMARY) 1945-1968  
(OVER-ALL) 1901-1968

AREA 0010 ATTU  
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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	4-10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2	.2
	11-21	.0	.1	.2	.0	.0	.0	.0	.0	.1	.0	.1	.0	.0	.0	.3	.1	.0	.0	9	.9
	22+	.0	.0	.0	.0	.1	.0	.0	.0	.2	.1	.1	.1	.1	.1	.1	.2	.0	.0	11	1.2
	TOTAL	0	1	2	0	1	1	0	0	3	1	2	1	2	1	4	3	0	0	22	2.3
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	1	.1
	4-10	.1	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	.0	.0	.0	3	.3
	11-21	.0	.0	.0	.0	.1	.1	.1	.0	.2	.1	.0	.2	.3	.1	.0	.0	.0	.0	12	1.3
	22+	.0	.0	.0	.1	.1	.0	.1	.3	.1	.2	.4	.4	.2	.2	.0	.0	.0	.0	21	2.2
	TOTAL	1	0	0	1	2	1	2	3	4	3	5	6	5	3	1	0	0	0	37	3.9
1<2	0-3	.0	.0	.0	.0	.0	.0	.1	.0	.1	.0	.2	.0	.4	.0	.0	.0	.0	.0	8	.8
	4-10	.1	.1	.1	.0	.0	.0	.3	.0	.0	.2	.2	.0	.0	.1	.4	.1	.0	.0	16	1.7
	11-21	.0	.0	.0	.2	.3	.1	.2	.1	.3	.1	.1	.2	.4	.0	.2	.1	.0	.0	23	2.4
	22+	.4	.0	.2	.5	.2	.5	.0	.3	.5	.2	.3	.0	.1	.0	.2	.2	.0	.0	36	3.8
	TOTAL	5	1	3	7	5	6	6	4	9	5	8	2	9	1	8	4	0	0	83	8.7
2<5	0-3	.0	.0	.0	.0	.0	.0	.1	.0	.0	.1	.0	.1	.1	.1	.1	.1	.0	.0	7	.7
	4-10	.0	.1	.2	.0	.0	.3	.3	.1	.1	.2	.2	.6	.2	.3	.2	.2	.0	.0	30	3.1
	11-21	.4	.1	.0	.0	1.0	.9	.1	.5	1.0	.3	.9	.4	.5	.4	.3	.3	.0	.0	65	6.8
	22+	.4	.0	.2	.5	.3	.3	.7	.7	.9	.8	.6	.2	.6	.0	.2	.0	.0	.0	64	6.7
	TOTAL	8	2	4	5	13	9	12	13	20	14	17	13	14	8	8	6	0	0	166	17.4
5<10	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.4	.3	.1	.0	.0	.2	11	1.2
	4-10	.3	.3	.2	.0	.1	.0	.1	.3	.3	.0	1.2	.6	1.5	.5	.3	.3	.0	.0	64	6.7
	11-21	.5	.5	.3	.1	.2	.5	.5	.4	1.9	1.5	.9	1.7	4.7	.7	2.2	.4	.0	.0	159	16.6
	22+	.6	.0	.4	.5	1.0	.4	.7	.5	1.7	.3	1.6	2.3	2.3	.7	.7	.4	.0	.0	137	14.3
	TOTAL	14	8	9	6	13	6	13	12	37	21	35	45	85	22	32	11	0	2	371	38.8
10+	0-3	.0	.0	.1	.0	.0	.0	.3	.0	.0	.0	.0	.3	.1	.0	.3	.1	.0	.3	15	1.6
	4-10	.3	.1	.2	.0	.3	.1	.3	.2	.4	.2	1.0	.4	1.2	.6	.5	.2	.0	.0	59	6.2
	11-21	1.0	.1	.4	.3	.7	.8	.4	.4	.3	.7	1.2	1.6	1.9	1.6	1.0	1.0	.0	.0	128	13.4
	22+	.3	.3	.2	.2	.7	.6	.0	.0	.2	.2	.6	.6	1.5	1.2	.6	.3	.0	.0	75	7.8
	TOTAL	16	5	9	5	17	5	20	6	9	11	27	28	44	32	24	16	0	3	277	29.0
	TOTAL	44	17	27	24	51	28	53	38	82	55	94	95	159	67	77	40	0	5	956	100.0
	PCT	4.6	1.8	2.8	2.5	5.3	2.9	5.5	4.0	8.6	5.8	9.8	9.9	16.6	7.0	8.1	4.2	.0	.5	100.0	

PERIOD: (PRIMARY) 1945-1968  
(OVER-ALL) 1901-1968

NOVEMBER

AREA 0010 ATTU  
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8), AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	OCCURRENCE OF NH <5/8 BY HOUR												TOTAL NH <5/8 ANY HGT OBS
	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL		
00&03	2.4	.6	2.4	7.3	26.7	16.4	14.5	3.0	4.2	1.8	79.4	20.6	165
06&09	4.0	.7	3.4	4.7	36.2	19.5	10.1	2.0	2.0	2.7	85.2	14.8	149
12&15	3.5	.7	2.1	4.2	20.3	17.5	9.8	1.4	1.4	3.5	64.3	35.7	143
18&21	.8	.8	.8	6.8	26.5	18.9	12.9	3.0	5.3	3.0	78.8	21.2	132
TOT	16	4	13	34	162	106	70	14	19	16	454	135	589
PCT	2.7	.7	2.2	5.8	27.5	18.0	11.9	2.4	3.2	2.7	77.1	22.9	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	PERCENT FREQUENCY VSBY (NM)										TOTAL OBS
	<1/2	1/2<1	1<2	2<5	5<10	10+					
00&03	1.8	3.7	3.0	10.4	43.3	37.8					164
06&09	3.4	.7	1.4	12.2	54.4	27.9					147
12&15	.7	3.6	1.4	7.9	49.3	37.1					140
18&21	.8	1.5	3.1	16.2	44.6	33.8					130
TOT	10	14	13	67	278	199					581
PCT	1.7	2.4	2.2	11.5	47.8	34.3					100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET, NH >4/8), BY HOUR

HOUR (GMT)	CEILING HGT (FEET, NH >4/8)				VSBY (NM)				TOTAL OBS
	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+				
00&03	2.4	9.1	24.4	56.1	19.5				164
06&09	4.1	10.2	25.2	59.9	15.0				147
12&15	2.9	7.9	20.7	45.0	34.3				140
18&21	.8	4.6	26.2	54.6	19.2				130
TOT	15	47	140	314	127				581
PCT	2.6	8.1	24.1	54.0	21.9				100.0



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PERIOD: (PRIMARY) 1945-1968  
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TABLE 13

TEMP F	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP										TOTAL DBS	PCT FREQ
	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100				
45/49	.0	.0	.0	.0	.2	1.9	1.9	5.9			42	9.9
40/44	.0	.0	.0	.5	4.3	6.1	9.5	23.2			184	43.5
35/39	.0	.0	.0	1.4	2.4	5.7	7.6	20.6			159	37.6
30/34	.0	.0	.0	.0	.2	2.1	1.9	4.5			37	8.7
25/29	.0	.0	.0	.0	.0	.0	.0	.2			1	.2
TOTAL	0	0	0	8	30	67	88	230			423	100.0
PCT	.0	.0	.0	1.9	7.1	15.8	20.8	54.4				

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP											VAR	CALM
N	NE	E	SE	S	SW	W	NW					
.0	.2	.9	1.2	4.3	1.2	1.7	.5				.0	.0
2.8	2.6	7.1	5.4	4.5	9.9	6.6	4.5				.0	.0
4.7	4.7	3.1	2.6	2.4	5.0	10.2	5.0				.0	.0
.7	.7	.2	.7	.0	1.2	2.8	2.4				.0	.0
.0	.0	.0	.0	.0	.0	.0	.2				.0	.0
35	35	48	42	47	73	90	53				0	0
8.3	8.3	11.3	9.9	11.1	17.3	21.3	12.5				.0	.0

TABLE 15

HOUR (GMT)	MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR										TOTAL DBS
	MAX	99%	95%	50%	5%	1%	MIN	MEAN			
00003	47	46	45	39	32	29	28	39.0			257
06009	48	47	45	39	31	28	27	38.6			252
12015	48	45	43	37	30	28	28	37.1			163
18021	48	47	45	38	31	28	27	38.2			244
TOT	48	47	45	38	31	28	27	38.3			916

TABLE 16

HOUR (GMT)	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR										TOTAL DBS
	0-29	30-39	60-69	70-79	80-89	90-100	MEAN				
00003	.0	1.4	7.2	15.1	19.4	56.8	88				139
06009	.0	1.6	8.1	15.3	19.4	55.6	87				124
12015	.0	5.0	2.5	22.5	30.0	40.0	84				40
18021	.0	1.6	7.2	15.2	23.2	52.8	87				125
TOT	0	8	30	68	92	230	87				428

PERIOD: (PRIMARY) 1945-1968  
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AREA 0010 ATTU  
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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	25	29	33	37	41	45	TOT	W FOG	MO FOG
5	.0	.0	.0	.0	.0	1.0	6	.0	1.0
4	.0	.0	.0	.3	3.2	.7	25	.0	4.2
3	.0	.0	.0	.0	.8	1.3	13	.3	1.9
2	.0	.0	.0	1.3	4.0	.3	34	.2	5.6
1	.0	.0	.0	2.7	3.0	.2	35	.2	5.7
0	.0	.0	.8	5.6	3.2	.3	59	.7	9.3
-1	.0	.0	.0	3.5	3.2	.2	41	.0	6.9
-2	.0	.0	.5	9.3	1.2	.2	66	.0	11.1
-3	.0	.0	.8	4.4	1.0	.0	37	.2	6.1
-4	.0	.2	4.7	6.2	.3	.0	68	.2	11.3
-5	.0	.2	6.2	4.6	.0	.0	65	.0	11.0
-6	.0	.3	6.1	1.9	.0	.0	49	.2	8.1
-7/-8	.0	4.2	5.1	.7	.0	.0	59	.3	9.6
-9/-10	.0	2.0	1.3	.0	.0	.0	20	.0	3.4
-11/-13	1.3	.7	.3	.2	.0	.0	15	.0	2.5
-14/-16	.0	.0	.2	.0	.0	.0	1	.0	.2
TOTAL	8	45	155	241	119	25	593	13	580
PCT	1.3	7.6	26.1	40.6	20.1	4.2	100.0	2.2	97.8

PERIOD: (PRIMARY) NOVEMBER  
(OVER-ALL) 1963-1968

TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N					NE					48+					TOTAL				
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47
<1	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	1.1	.0	.0	.0	.0	.4	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.7	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOTAL	.0	1.8	1.5	4	3	.0	.0	1.1	1.1	1.5	.0	.0	3	2	2.7	.0	.0	3	2	7
PCT	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

HGT	E					SE					48+					TOTAL				
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47
<1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5-6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.7	.4	.0	.0	.0	.7	.4	.0	.0	.0	.7	.4	.0	.0	.0	.0	.0
8-9	.0	.0	.0	.4	.0	.0	.0	.0	.4	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0
10-11	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.0	.7	1.5	.0	.0	.0	.7	.4	.0	.0	.0	.7	.4	.0	.0	.0	.0	.0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOTAL	.0	.0	.0	6	5	.0	.0	1	2.2	1.8	.0	.0	1	6	2.2	.0	.0	1	6	16
PCT	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

PERIOD: (PRIMARY)

(OVER-ALL) 1963-1968

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TABLE 18

AREA 0010

ATTU

51-55N

172-180E

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	S					SW					NW					TOTAL	48+	TOTAL	GRAND TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	48+				
<1	.0	.0	.0	.0	.0	.0	0	.4	.0	.0	.0	.0	.0	.0	.0	3	.0	6	6
1-2	.0	.0	.7	.0	.0	.0	2	.0	1.1	2.6	.0	.0	.0	.0	.0	6	.0	33	33
3-4	.0	.4	1.8	.0	.0	.0	6	.0	.7	2.9	1.1	.0	.0	.0	.0	13	.0	59	59
5-6	.0	.0	1.5	.7	.0	.0	8	.0	.0	.7	2.2	.4	.0	.0	.0	5	.0	38	38
7	.0	.0	1.1	1.5	.7	.7	11	.0	.0	.4	2.2	.4	.0	.0	.0	5	.0	38	38
8-9	.0	.0	.0	.4	.4	.0	2	.0	.0	.4	.4	.7	.0	.0	.0	.0	.0	8	8
10-11	.0	.0	.0	.4	1.5	.4	6	.0	.0	.4	1.8	.7	.0	.0	.0	.0	.0	8	8
12	.0	.0	.0	.4	1.1	.0	4	.0	.0	.4	1.1	.0	.0	.0	.0	.0	.0	4	4
13-16	.0	.0	.0	.0	.7	.0	2	.0	.0	.0	.7	.4	.0	.0	.0	.0	.0	4	4
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.4	.4	.0	.0	.0	.0	.0	2	2
20-22	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
23-25	.0	.0	.0	.0	.0	.4	1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1	1
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
TOTAL	0	1	14	9	14	4	42	1	5	21	27	9	1	9	1	64	0	64	64
PCT	.0	.4	5.1	3.3	5.1	1.5	15.3	.4	1.8	7.7	9.9	3.3	.4	7.7	.4	23.4	.4	23.4	23.4

HGT	W					NW					NW					TOTAL	48+	TOTAL	GRAND TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	48+				
<1	.4	.0	.0	.0	.0	.0	1	.4	.7	.0	.0	.0	.0	.0	.0	3	.0	6	6
1-2	.4	.7	2.6	.0	.0	.0	10	.0	.0	2.2	.0	.0	.0	.0	.0	6	.0	33	33
3-4	.0	2.2	4.7	1.5	.0	.0	23	.0	.4	4.0	.4	.0	.0	.0	.0	13	.0	59	59
5-6	.0	.4	3.6	.4	.0	.0	12	.0	.0	1.1	.7	.0	.0	.0	.0	5	.0	38	38
7	.0	.0	1.8	.7	.0	.0	7	.0	.0	.7	1.1	.0	.0	.0	.0	5	.0	38	38
8-9	.0	.0	.4	1.1	.0	.0	4	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	17	17
10-11	.0	.0	.4	1.8	.7	.7	11	.0	.0	.4	.4	.4	.0	.0	.0	.0	.0	36	36
12	.0	.0	.4	.0	.4	.0	3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	13	13
13-16	.0	.0	.7	.7	.4	.0	5	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	23	23
17-19	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	3
20-22	.0	.0	.0	.7	.0	.0	2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2	2
23-25	.0	.0	.0	.0	.4	.0	2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	3
26-32	.0	.0	.0	.4	.0	.0	2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	0
TOTAL	2	9	40	20	7	2	80	1	3	23	9	1	1	37	1	274	1	274	274
PCT	.7	3.3	14.6	7.3	2.6	.7	29.2	.4	1.1	8.4	3.3	.4	.4	13.5	.4	100.0	.4	100.0	100.0

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PERIOD: (PRIMARY)  
(OVER-ALL) 1963-1968

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AREA 0010 ATTU  
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TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	1.8	1.1	.0	.0	.0	.0					8
1-2	.7	3.2	8.3	.0	.0	.0					34
3-4	.0	3.6	14.7	2.9	.0	.0					59
5-6	.4	.4	7.6	4.3	1.4	.0					39
7	.0	.0	4.3	6.8	1.8	.7					38
8-9	.0	.0	.7	3.2	2.2	.0					17
10-11	.0	.0	1.1	5.4	5.4	1.1					36
12	.0	.0	.7	1.8	2.2	.0					13
13-16	.0	.0	.7	2.9	3.2	1.4					23
17-19	.0	.0	.0	.7	.4	.0					3
20-22	.0	.0	.0	1.1	.0	.0					3
23-25	.0	.0	.0	.0	.0	.7					2
26-32	.0	.0	.0	.4	.0	.0					3
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	8	23	106	82	48	11					278
PCT	2.9	8.3	38.1	29.5	17.3	4.0					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	.2	7.0	8.0	3.4	2.0	.0	1.2	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	110	3
6-7	.0	.4	3.0	4.6	4.4	1.4	1.4	1.0	.8	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	87	6
8-9	.0	.4	3.0	.6	3.0	2.6	7.2	1.6	3.8	.6	.4	.0	.2	.0	.0	.0	.0	.0	.0	117	9
10-11	.0	.0	.0	.0	.0	.2	.0	.2	.8	.6	.4	.2	.2	.0	.0	.0	.0	.0	.0	13	16
12-13	.0	.0	.0	.0	.0	.0	.4	.0	.2	.0	.0	.2	.2	.0	.0	.0	.0	.0	.0	5	17
>13	.0	.0	.0	.0	.0	.0	.0	.2	.2	.0	.2	.4	.0	.0	.0	.0	.0	.0	.0	5	19
INDET	32.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	160	0
TOTAL	160	39	70	43	47	21	51	15	31	6	7	4	3	0	0	0	0	0	0	497	5
PCT	32.2	7.8	14.1	8.7	9.5	4.2	10.3	3.0	6.2	1.2	1.4	.8	.6	.0	.0	.0	.0	.0	.0	100.0	

DECEMBER

PERIOD: (PRIMARY) 1943-1969  
(OVER-ALL) 1907-1969

AREA 0010 ATTU  
51-55N 172-180E

TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	PRECIPITATION TYPE			HAIL	PCPN AT		TOTAL	THDR		OTHER WEATHER PHENOMENA				TOTAL OBS
			DRZL	FRZG	PCPN		PCPN	OB TIME		LTNG	WD	PCPN	FOG	SMOKE	DUST	
N	.2	.0	.2	.0	.0	.0	.0	3.1	17	.0	.0	.0	.0	.0	.0	35
NNE	.2	.2	.0	.0	.6	.0	.0	.7	4	.0	.0	.0	.0	.0	.0	20
NE	1.1	.2	.2	.0	3.3	.0	.2	4.6	25	.0	.0	.0	.0	.0	.0	50
ENE	.2	.0	.4	.0	.7	.0	.0	1.3	7	.0	.0	.0	.0	.0	.0	17
E	1.5	.0	1.3	.0	2.8	.0	.0	5.1	28	.0	.0	.2	.0	.0	.0	42
ESE	.6	.2	.0	.0	1.5	.0	.0	2.0	11	.0	.0	.0	.0	.0	.0	22
SE	.2	.2	1.3	.0	2.2	.0	.0	3.9	21	.0	.0	.0	.0	.0	.2	45
SSE	.4	.0	.6	.0	.4	.0	.0	1.3	7	.0	.0	.4	.0	.0	.0	28
S	.9	.4	.2	.0	.7	.0	.0	2.2	12	.0	.0	.4	.0	.0	.0	40
SSW	.2	.0	.4	.0	.4	.0	.0	.9	5	.0	.0	.7	.0	.0	.0	38
SW	.0	.0	.0	.0	.6	.0	.2	.7	4	.0	.0	.0	.0	.0	.0	39
WSW	.0	.0	.0	.0	1.1	.0	.2	1.3	18	.0	.0	.0	.0	.0	.0	61
W	.4	.4	.7	.0	2.2	.0	.0	3.3	4	.0	.0	.0	.0	.0	.0	23
WNW	.0	.2	.0	.0	.4	.0	.2	.7	13	.0	.0	.0	.0	.0	.0	27
NW	.2	.0	.2	.0	2.0	.0	.0	2.4	5	.0	.0	.0	.0	.0	.0	13
NNW	.2	.0	.2	.0	.6	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
VAR	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	6
CALM	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	1.1
TOT OBS	33	9	30	0	120	0	.4	.0	188	0	9	.0	.0	.0	.0	347
TOT PCT	6.1	1.7	5.5	.0	22.0	.0	.7	34.5	.0	.0	1.7	.0	.2	.0	.0	63.7

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	PRECIPITATION TYPE			HAIL	PCPN AT		TOTAL	THDR		OTHER WEATHER PHENOMENA				TOTAL OBS
			DRZL	FRZG	PCPN		PCPN	OB TIME		LTNG	WD	PCPN	FOG	SMOKE	DUST	
00003	2.1	2.1	3.5	.0	24.6	.0	1.4	32.4	46	.0	1.4	.0	.0	.0	.0	142
06009	9.9	2.0	6.0	.0	26.5	.0	.0	42.4	64	.0	2.6	.0	.0	.0	.0	151
12015	4.5	.9	7.1	.0	10.7	.0	1.8	22.3	25	.0	1.8	.0	.0	.0	.0	112
18021	7.3	1.3	7.3	.0	22.0	.0	.0	37.3	56	.0	1.3	.0	.0	.0	.7	150
TOT	34	9	33	0	120	0	.4	.0	191	0	10	.0	.0	.0	.0	555
PCT	6.1	1.6	5.9	.0	21.6	.0	.7	34.4	.0	.0	1.8	.0	.2	.0	.0	63.6

DECEMBER

PERIOD: (PRIMARY) 1943-1969  
(OVER-ALL) 1907-1969

AREA 0010 ATTU  
51-55N 172-180E

TABLE 2

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)										HOUR (GMT)				
	0-3	4-10	11-21	22-33	34-47	48+	TOTAL OBS	PCT FREQ	MEAN SPD	00	03	06	09	12	15
N	1.1	2.5	2.3	1.1	.4	.0	59	7.5	13.4	9.3	20.0	7.3	7.8	6.5	.0
NNE	.0	.6	1.4	1.0	.1	.0	25	3.2	18.6	3.7	.0	4.1	1.1	4.5	.0
NE	.1	5.8	3.9	1.3	.3	.0	90	11.4	13.1	9.7	.0	7.3	21.1	6.5	.0
ENE	.0	.8	1.5	.6	.3	.1	26	3.3	19.2	2.8	40.0	3.3	1.1	2.4	50.0
E	.1	1.5	2.9	2.8	.6	.0	63	8.0	19.9	10.2	.0	5.7	10.0	7.3	.0
ESE	.1	1.0	1.4	1.5	.0	.0	32	4.1	17.1	2.3	.0	4.9	4.4	4.8	.0
SE	.1	1.8	3.3	1.6	.4	.0	57	7.2	17.9	6.9	.0	3.7	5.6	4.0	.0
SSE	.0	1.0	1.3	1.1	.6	.1	33	4.2	22.0	5.1	.0	7.3	1.1	5.6	.0
S	.3	1.8	3.4	1.1	.5	.0	56	7.1	16.8	6.5	.0	8.9	6.7	8.9	.0
SSW	.3	.9	3.0	1.3	.1	.0	44	5.6	16.7	4.2	.0	10.6	2.2	8.1	.0
SW	.0	1.3	3.9	.8	.1	.0	48	6.1	15.9	6.0	20.0	6.5	3.3	8.9	.0
WSW	.1	1.4	3.2	1.5	.6	.0	54	6.9	18.9	7.9	.0	6.5	3.3	5.6	25.0
W	.6	2.8	3.4	3.0	1.0	.0	86	10.9	17.7	10.6	.0	8.1	11.1	14.5	25.0
WNW	.3	1.6	1.1	.9	.4	.0	34	4.3	15.8	3.2	.0	5.7	5.6	1.6	.0
NW	1.3	2.0	1.8	1.1	.0	.0	49	6.2	12.2	6.0	20.0	4.1	12.2	6.5	.0
NNW	.0	.5	1.3	1.1	.3	.0	25	3.2	20.1	4.6	.0	2.4	3.3	1.6	.0
VAR	.1	.0	.0	.0	.0	.0	1	.1	2.0	.5	.0	.0	.0	.0	.0
CALM	.8	216	309	174	45	2	6	.8	.0	.5	.0	1.6	.0	2.4	.0
TOT OBS	42	27.4	39.2	22.1	5.7	.3	788	100.0	16.6	216	5	123	90	124	102
TOT PCT	5.3	27.4	39.2	22.1	5.7	.3	788	100.0	16.6	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPL.D (KNOTS)										HOUR (GMT)				
	0-6	7-16	17-27	28-40	41+	TOTAL OBS	PCT FREQ	MEAN SPD	00	03	06	09	12	15	18
N	2.8	3.3	3.4	1.1	.0	84	10.7	15.0	13.0	20.0	11.4	8.9	11.3	.0	8.9
NE	2.4	5.1	3.2	.8	.3	116	14.7	14.4	12.5	40.0	10.6	22.2	8.9	50.0	12.1
E	1.0	4.6	4.4	1.8	.3	95	12.1	19.0	12.5	.0	10.6	14.4	12.1	.0	8.9
SE	.6	4.7	3.6	2.3	.3	90	11.4	19.4	12.0	.0	13.0	6.7	9.7	.0	14.5
S	1.8	4.6	4.7	1.5	.1	100	12.7	16.8	10.6	.0	19.5	8.9	16.9	.0	16.1
SW	.9	6.1	4.6	.9	.5	102	12.9	17.5	13.9	20.0	13.0	6.7	14.5	25.0	16.1
W	3.3	4.8	4.4	2.7	.0	140	15.2	17.2	13.9	.0	13.8	16.7	16.1	25.0	16.7
NW	2.7	2.8	2.9	1.0	.0	74	9.4	14.9	10.6	20.0	6.5	15.6	8.1	.0	7.3
VAR	.1	.0	.0	.0	.0	1	.1	2.0	.5	.0	.0	.0	.0	.0	.0
CALM	.8	307	246	95	11	6	.8	.0	.5	.0	1.6	.0	2.4	.0	.0
TOT OBS	129	307	246	95	11	788	100.0	16.6	216	5	123	90	124	4	124
TOT PCT	16.4	39.0	31.2	12.1	1.4	788	100.0	16.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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TABLE 4

PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)

HOUR	1-3	4-10	11-21	WIND SPEED (KNOTS)			PCT	
				22-33	34-47	48+	MEAN	TOTAL
0000	3.6	26.8	40.5	22.3	5.9	.5	16.9	100.0
0600	7.0	28.2	38.0	21.6	3.8	.5	15.8	100.0
1200	.0	20.3	44.5	24.2	9.6	.0	2.3	100.0
1800	5.3	31.4	36.3	21.2	5.8	.0	16.1	100.0
TOT	35	216	309	174	45	2	6	787
PCT	4.4	27.4	39.3	22.1	5.7	.3	.8	100.0

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION								MEAN CLOUD COVER
	0-2	3-4	5-7	8 &	9-12	13-17	18-24	25-31	
N	.5	.5	2.5	1.6	22	6.1			
NNE	.2	.0	1.8	2.0	18	6.9			
NE	1.1	.2	1.1	4.8	32	6.6			
ENE	.0	.2	.7	1.8	12	7.3			
E	.2	.2	.2	5.0	25	7.5			
ESE	.5	.0	.2	3.6	19	7.1			
SE	.0	.2	.9	5.9	31	7.6			
SSE	.2	.0	.5	5.5	27	7.6			
S	.0	.5	1.6	7.5	42	7.4			
SSW	.5	.5	1.0	5.0	33	6.9			
SW	.0	.9	3.0	5.0	39	6.9			
WSW	.7	1.6	3.2	2.0	33	5.5			
W	.2	1.4	2.3	5.9	43	6.7			
WNW	.2	.7	2.3	1.8	22	6.1			
NW	.7	.5	2.3	1.6	22	5.8			
NNW	.2	.7	.9	1.4	14	5.9			
VAR	.0	.0	.0	.0	0	.0			
CALM	.0	.2	.7	.5	6	6.0			
TOT OBS	23	36	113	268	440	6.8			
TOT PCT	5.2	8.2	25.7	60.9	100.0				

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH >4/8)

AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION

WIND DIR	AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION												NH <5/8 ANY HGT	TOTAL OBS				
	0-2	3-4	5-7	8 & OBSCD	TOTAL OBS	CLOUD COVER	000 149	150 299	300 599	600 999	1000 1999	2000 3499			3500 4999	5000 6499	6500 7999	8000+
N	.5	.5	2.5	1.6	22	6.1	.0	.0	.2	.7	1.6	.9	.0	.0	.2	.0	1.4	22
NNE	.2	.0	1.8	2.0	18	6.9	.0	.0	.0	.0	1.1	2.0	.0	.2	.0	.0	.7	18
NE	1.1	.2	1.1	4.8	32	6.6	.0	.0	.0	.5	2.3	2.3	.0	.0	.0	.5	1.8	32
ENE	.0	.2	.7	1.8	12	7.3	.0	.0	.0	.0	.9	1.1	.0	.0	.2	.0	.5	12
E	.5	.0	.2	5.0	25	7.5	.0	.0	.2	.0	3.2	.7	.0	.0	.0	.0	1.4	25
ESE	.2	.2	.2	3.6	19	7.1	.0	.0	.0	.2	1.4	1.1	.7	.0	.0	.5	.5	19
SE	.0	.2	.9	5.9	31	7.6	.2	.0	.0	.5	3.6	1.1	.7	.0	.0	.2	.7	31
SSE	.2	.0	.5	5.5	27	7.6	.7	.0	.2	.5	3.2	.9	.5	.0	.0	.0	.2	27
S	.7	.5	1.6	7.5	42	7.4	.7	.0	.0	.9	2.5	2.5	.2	.0	.0	.9	1.8	42
SSW	.5	.5	1.6	5.0	33	6.9	.9	.0	.0	.2	3.0	1.8	.2	.0	.0	.0	1.4	33
SW	.0	.9	3.0	5.0	39	6.9	.0	.0	.0	.5	2.5	2.5	.7	.2	.2	.2	2.0	39
WSW	.7	1.6	3.2	2.0	33	5.5	.2	.0	.0	.5	1.4	1.4	.2	.0	.0	.5	3.4	33
W	.2	1.4	2.3	5.9	43	6.7	.0	.2	.0	1.4	2.3	3.0	.2	.2	.2	.0	2.5	43
WNW	.2	.7	2.3	1.8	22	6.1	.0	.0	.0	.9	2.3	.7	.0	.0	.0	.0	1.1	22
NW	.7	.5	2.3	1.6	22	5.8	.0	.0	.7	.9	.7	1.4	.0	.0	.0	.2	1.1	22
NNW	.2	.7	.9	1.4	14	5.9	.0	.0	.2	.2	.7	.9	.2	.0	.0	.0	.9	14
VAR	.0	.0	.0	.5	0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	0
CALM	.0	.2	.7	.5	6	6.0	.0	.0	.0	.0	.0	.5	.0	.0	.0	.0	.5	6
TOT OBS	23	36	113	268	440	6.8	12	1	7	35	145	109	15	3	4	13	96	440
TOT PCT	5.2	8.2	25.7	60.9	100.0		2.7	.2	1.6	8.0	33.0	24.8	3.4	.7	.9	3.0	21.8	100.0



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TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NH)

CEILING (FEET)	VSBY (NH)									
	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0		
= OR >6500	3.4	3.8	3.8	3.8	3.8	3.8	3.8	3.8		
= OR >5000	3.8	4.5	4.5	4.5	4.5	4.5	4.5	4.5		
= OR >3500	4.9	7.6	7.6	7.8	7.8	7.8	7.8	7.8		
= OR >2000	17.9	30.6	31.3	32.2	32.7	32.7	32.7	32.7		
= OR >1000	27.7	54.8	62.2	64.4	65.3	65.3	65.3	65.3		
= OR >600	31.3	60.6	70.2	72.9	73.8	73.8	74.0	74.0		
= OR >300	31.5	61.5	71.1	74.3	75.6	75.6	75.8	75.8		
= OR >150	31.8	61.7	71.4	74.5	75.8	75.8	76.1	76.1		
= OR > 0	31.8	61.7	71.8	74.9	76.7	78.3	79.0	79.0		
TOTAL	142	276	321	335	343	350	353	353		

TOTAL NUMBER OF OBS: 447

PCT FREQ NH <5/8: 21.0

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

										TOTAL OBS	
0	1	2	3	4	5	6	7	8	OBSCD		
1.1	1.5	5.7	6.4	6.2	9.1	8.3	5.7	53.2	2.8	470	

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.0	.0	.2	.0	.2	.2	.0	.0	.2	.0	.0	.2	.2	.0	.2	.0	.0	.0	7	1.3
NO PCP	.0	.0	.0	.0	.0	.0	.0	.2	.4	.7	.0	.0	.0	.0	.0	.0	.0	.0	7	1.3
TOTAL	0	0	1	0	1	1	0	1	3	4	0	1	1	0	1	0	0	0	14	2.6
PCP	.4	.6	.4	.7	.6	.6	.0	.2	.2	.2	.0	.2	1.1	.0	.2	.0	.0	.0	28	5.2
NO PCP	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	1	.2
TOTAL	2	3	2	4	3	3	0	1	1	1	0	1	6	0	1	1	0	0	29	5.4
PCP	.9	.0	1.1	.0	1.3	.6	.6	.2	.0	.2	.0	.0	.0	.4	1.3	.4	.0	.0	37	6.9
NO PCP	.0	.0	.0	.0	.0	.0	.6	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	4	.7
TOTAL	5	0	6	0	7	3	6	1	0	1	0	0	0	3	7	2	0	0	41	7.6
PCP	.2	.0	1.1	.4	2.0	.0	1.3	.6	.7	.4	.0	.6	.3	.0	.4	.0	.0	.0	46	8.5
NO PCP	.0	.0	.4	.0	.2	.0	1.1	.9	.2	.7	.7	.6	.7	.2	.4	.2	.0	.0	34	6.3
TOTAL	1	0	8	2	12	0	13	8	5	6	4	6	9	1	4	1	0	0	80	14.8
PCP	1.7	.2	1.7	.2	1.1	.7	1.3	.4	.9	.2	.6	.4	.9	.0	.2	.4	.0	.0	58	10.7
NO PCP	1.1	1.5	2.2	1.3	.2	.6	.9	1.3	3.0	1.5	3.1	1.9	3.1	2.0	.6	.2	.0	.2	133	24.6
TOTAL	15	9	21	8	7	7	12	9	21	9	20	12	22	11	4	3	0	1	191	35.4
PCP	.0	.0	.2	.0	.0	.0	.4	.0	.2	.0	.2	.0	.0	.4	.4	.2	.0	.0	10	1.9
NO PCP	2.2	1.5	2.0	.6	2.0	1.5	1.9	1.5	1.7	3.1	2.6	3.5	3.9	.9	1.7	.9	.0	.9	175	32.4
TOTAL	12	8	12	3	11	8	12	8	10	17	15	19	21	7	11	6	0	5	185	34.3
TOTAL	35	20	50	17	41	22	43	28	40	38	39	39	59	22	28	13	0	6	540	100.0
PCT	6.5	3.7	9.3	3.1	7.6	4.1	8.0	5.2	7.4	7.0	7.2	7.2	10.9	4.1	5.2	2.4	.0	1.1	100.0	

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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1	.1
	4-10	.0	.0	.1	.0	.0	.0	.0	.1	.1	.1	.0	.0	.0	.0	.1	.0	.0	.0	5	.6
	11-21	.0	.0	.0	.1	.0	.0	.0	.0	.0	.4	.0	.1	.0	.0	.0	.0	.0	.0	7	.9
	22+	.0	.0	.0	.0	.1	.0	.0	.0	.3	.0	.1	.0	.0	.0	.0	.0	.0	.0	4	.5
	TOTAL	1	0	1	1	1	1	0	3	3	4	1	1	1	0	1	0	0	0	17	2.2
1/2<1	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
	4-10	.1	.0	.3	.0	.0	.1	.1	.1	.1	.0	.0	.1	.1	.1	.0	.0	.0	.0	10	1.3
	11-21	.0	.1	.0	.4	.0	.4	.0	.3	.3	.1	.0	.3	.3	.1	.1	.1	.0	.0	20	2.6
	22+	.1	.3	.0	.3	.1	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	10	1.3
	TOTAL	2	3	2	5	4	4	1	3	3	1	0	3	6	2	1	1	0	0	40	5.1
1<2	0-3	.4	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0	7	.9
	4-10	.4	.0	.6	.1	.1	.1	.6	.0	.1	.1	.0	.1	.4	.3	.1	.1	.0	.0	26	3.3
	11-21	.0	.0	.1	.1	.3	.0	.3	.0	.1	.1	.0	.0	.1	.3	.3	.0	.0	.0	13	1.7
	22+	.1	.0	.1	.0	.6	.3	.4	.1	.1	.0	.0	.0	.1	.1	.3	.3	.0	.0	20	2.6
	TOTAL	7	0	8	2	8	3	10	3	3	2	0	1	5	5	8	3	0	0	66	8.5
2<5	0-3	.3	.0	.0	.0	.1	.1	.0	.0	.0	.3	.0	.1	.1	.1	.4	.0	.0	.0	12	1.5
	4-10	.3	.0	1.5	.0	.6	.0	.3	.5	.1	.1	.0	.4	.6	.4	.5	.0	.0	.0	43	5.5
	11-21	.0	.0	.4	.1	.6	.0	1.2	.3	.3	.4	.5	.4	.5	.0	.1	.1	.0	.0	38	4.9
	22+	.0	.0	.5	.4	1.0	.1	.8	.5	.3	.4	.1	.3	.6	.0	.0	.3	.0	.0	41	5.2
	TOTAL	4	0	19	4	19	3	17	10	5	9	5	9	15	4	8	3	0	0	134	17.2
5<10	0-3	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.5	.0	.3	.0	.0	.1	8	1.0
	4-10	.6	.5	1.5	.3	.4	.3	.3	1.2	.1	.1	.8	.3	.6	.4	.4	.1	.0	.0	62	7.9
	11-21	1.2	.5	1.8	.5	.6	.6	.9	1.5	.6	.6	1.8	.8	1.4	.4	.3	.4	.0	.0	106	13.6
	22+	.6	.4	.8	.3	.5	.3	.4	.8	.5	.5	.3	1.0	1.3	1.0	.3	.3	.0	1	74	9.5
	TOTAL	19	11	32	8	12	9	12	28	10	10	22	16	30	14	9	6	0	1	250	32.0
10+	0-3	.4	.0	.0	.0	.0	.0	.1	.0	.1	.0	.0	.0	.0	.1	.3	.0	.1	.6	14	1.8
	4-10	1.2	.1	1.8	.4	.4	.4	.3	.0	.1	.4	.5	.5	1.0	.5	.9	.3	.0	.0	68	8.7
	11-21	1.2	.8	1.7	.3	1.0	.3	1.0	1.3	.8	1.4	1.7	1.7	1.0	.4	1.0	.5	.0	.0	124	15.9
	22+	.6	.5	.1	.1	.9	.9	.5	.3	.9	.5	.4	.9	1.4	.0	.6	.6	.0	.0	68	8.7
	TOTAL	26	11	28	6	18	12	15	8	14	18	20	24	27	8	22	11	1	5	274	35.1
	TOTAL	59	25	90	26	62	32	55	33	55	44	48	54	84	33	49	24	1	6	781	100.0
	PCT	7.6	3.2	11.5	3.3	7.9	4.1	7.0	4.2	7.2	5.6	6.1	6.9	10.8	4.2	6.3	3.1	.1	.8	100.0	

PERIOD: (PRIMARY) 1943-1969  
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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET, NH >4/8), AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	6500 7999	8000+	TOTAL	NH <5/8 ANY HGT	TOTAL OBS
00003	2.5	.0	3.4	13.4	24.4	25.2	4.2	.8	1.7	3.4	79.0	21.0	119
06009	2.5	.0	.8	5.8	40.8	26.7	2.5	.8	.0	2.5	82.5	17.5	120
12015	1.9	1.0	2.9	9.5	23.8	25.7	1.9	.0	.0	4.8	71.4	28.6	105
18021	4.6	.0	.0	4.6	41.7	20.4	4.6	.9	1.9	.9	79.6	20.4	108
TOT	13	1	8	38	148	111	15	3	4	13	354	98	452
PCT	2.9	.2	1.8	8.4	32.7	24.6	3.3	.7	.9	2.9	78.3	21.7	100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	.8	2.5	4.2	8.5	39.8	44.1	118
06009	3.4	.8	3.4	16.1	32.2	44.1	118
12015	1.9	2.9	3.9	6.8	33.0	51.5	103
18021	2.8	.9	.9	13.9	35.2	46.3	108
TOT	10	8	14	51	157	207	447
PCT	2.2	1.8	3.1	11.4	35.1	46.3	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET, NH >4/8), BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND 5+	NH <5/8 AND 5+	TOTAL OBS
00003	2.5	5.9	26.3	54.2	19.5	118
06009	2.5	5.1	28.0	55.9	16.1	118
12015	1.9	7.8	24.3	50.5	25.2	103
18021	4.6	5.6	23.1	58.3	18.5	108
TOT	13	27	114	245	88	447
PCT	2.9	6.0	25.5	54.8	19.7	100.0

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PERIOD: (PRIMARY) 1943-1969  
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TABLE 13

TEMP F	PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP										TOTAL DBS	PCT FREQ
	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100				
40/44	.0	.0	.0	.3	.5	1.6	4.3	4.8			43	11.4
35/39	.0	.0	.0	1.3	4.3	9.8	12.2	21.3			184	48.9
30/34	.0	.0	.0	.5	4.0	8.2	8.8	15.4			139	37.0
25/29	.0	.0	.0	.0	.0	.0	.3	2.4			10	2.7
TOTAL	0	0	0	8	33	74	96	165			376	100.0
PCT	.0	.0	.0	2.1	8.8	19.7	25.5	43.9				

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP											VAR	CALM
N	NE	E	SE	S	SW	W	NW					
.5	1.6	2.7	1.6	1.1	1.6	1.3	1.1				.0	.0
5.3	5.9	8.8	5.9	4.8	5.6	6.6	5.9				.0	.3
5.6	11.2	1.3	.8	1.3	3.2	7.4	5.9				.3	.0
.3	1.1	.3	.0	.0	.5	.5	.0				.0	.0
44	74	49	31	27	41	60	48				1	1
11.7	19.7	13.0	8.2	7.2	10.9	16.0	12.8				.3	.3

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR											TOTAL DBS
HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN			
00003	43	42	41	36	30	29	28	35.7			206
06009	45	44	42	35	28	27	27	35.2			204
12015	42	41	40	35	30	28	28	34.7			118
18021	46	43	41	35	28	27	27	34.9			216
TOT	46	42	41	35	30	27	27	35.2			744

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR											MEAN	TOTAL DBS
HOUR (GMT)	0-29	30-39	60-69	70-79	80-89	90-100						
00003	.0	.0	10.3	19.0	26.7	44.0					95	116
06009	.0	5.5	9.1	20.9	22.7	41.8					84	110
12015	.0	5.4	8.1	18.9	29.7	37.8					84	37
18021	.0	.0	6.8	19.7	24.8	48.7					86	117
TOT	0	8	33	75	96	168					85	380

PERIOD: (PRIMARY) 1943-1969  
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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	25	29	33	37	41	TOT	W	WD
	28	32	36	40	44		FUG	FDG
4	.0	.0	.0	.2	.2	2	.0	.4
3	.0	.0	.0	.2	.7	4	.0	.9
2	.0	.0	.0	1.6	1.1	12	.2	2.5
1	.0	.0	.4	4.3	1.1	26	.0	5.8
0	.0	.0	1.1	3.4	.7	23	.2	4.9
-1	.0	.0	3.1	5.6	.7	42	.2	9.2
-2	.0	.0	14.1	5.6	.4	90	.4	19.7
-3	.0	.2	5.2	2.0	.0	33	.7	6.7
-4	.0	3.8	5.8	1.3	.0	49	.2	10.8
-5	.0	2.2	7.0	.4	.0	43	.0	9.6
-6	.0	1.1	2.0	.4	.0	16	.0	3.6
-7/-8	.0	4.7	4.0	.9	.0	43	.0	9.6
-9/-10	2.2	7.0	.9	.0	.0	45	.2	9.9
-11/-13	2.7	1.1	.2	.0	.0	18	.0	4.0
TOTAL	22	90	196	116	22	446	10	436
PCT	4.9	20.2	43.9	26.0	4.9	100.0	2.2	97.8

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	N					NE					TOTAL	48+	TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47					
<1	.0	1.1	.0	.0	.0	.0	.0	.0	.0	.0	2	.0	.0	.0	0
1-2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
3-4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	1
5-6	.0	.0	1.1	.0	.0	.0	1.1	2.1	.0	.0	2	.0	.0	.0	6
7	.0	.0	1.1	.0	.0	.0	.0	.0	.0	.0	3	.0	.0	.0	0
8-9	.0	.0	1.6	1.1	.5	.0	.0	1.1	1.1	.0	6	.0	.0	.0	4
10-11	.0	.0	1.6	.5	.0	.0	.0	1.1	.5	.0	4	.0	.0	.0	3
12	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
13-16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	0	.0	.0	.0	1
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
TOTAL	0	2	10	4	1	0	2	8	4	1	17	0	4	1	15
PCT	.0	1.1	5.3	2.1	.5	.0	1.1	4.3	2.1	.5	9.0	.0	2.1	.5	8.0

HGT	E					SE					TOTAL	48+	TOTAL	48+	TOTAL
	1-3	4-10	11-21	22-33	34-47	1-3	4-10	11-21	22-33	34-47					
<1	.0	.5	.0	.0	.0	.0	.5	.0	.0	.0	1	.0	.0	.0	1
1-2	.0	.0	.5	.0	.0	.0	2.7	.0	.0	.0	1	.0	.0	.0	5
3-4	.0	.0	2.1	.0	.0	.0	.0	1.1	.0	.0	4	.0	.0	.0	2
5-6	.0	.0	.5	.0	.0	.0	.0	2.1	.5	.5	1	.0	.0	.0	6
7	.0	.0	.0	1.6	.0	.0	.0	1.1	1.1	1.6	3	.0	.0	.0	7
8-9	.0	.0	.0	.0	.0	.0	.0	.5	.0	.5	0	.0	.0	.0	2
10-11	.0	.0	.5	1.1	.0	.0	.0	.0	.5	.0	3	.0	.0	.0	1
13-16	.0	.0	.5	2.7	.0	.0	.0	.5	2.1	.5	1	.0	.0	.0	2
17-19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	6	.0	.0	.0	8
20-22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
23-25	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
26-32	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	0
TOTAL	0	1	9	10	0	0	6	14	8	6	20	0	14	6	34
PCT	.0	.5	4.8	5.3	.0	.0	3.2	7.4	4.3	3.2	10.6	.0	3.2	3.2	18.1

PERIOD: (PRIMARY)		DECEMBER										AREA 0010		ATTU	
(OVER-ALL)		TABLE 18										51-55N		172-180E	
		PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)													
HGT		S										SW		48+	TOTAL
		1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47		
<1		.0	.5	.0	.0	.0	.0	1	.0	.0	.0	.0	.0	.0	0
1-2		.0	2.1	.0	.0	.0	.0	4	.0	.0	.0	.0	.0	.0	0
3-4		.0	1.1	4.3	.0	.0	.0	10	.0	.0	3.2	.5	.0	.0	7
5-6		.0	.0	3.7	.5	.5	.0	9	.0	.5	1.6	.5	.0	.0	5
7		.0	.0	1.1	.0	.0	.0	2	.0	.0	.5	.0	.0	.0	1
8-9		.0	.0	.0	.0	.0	.0	.0	.0	.0	1.6	.0	.0	.0	.0
10-11		.0	.0	2.1	1.1	.0	.0	6	.0	.0	1.6	.0	.0	.0	3
12		.0	.0	.0	1.1	.5	.0	3	.0	.0	.0	.0	.0	.0	.0
13-16		.0	.0	.0	.5	.0	.0	1	.0	.0	1.1	.5	.0	.0	.0
17-19		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20-22		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
23-25		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
26-32		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
33-40		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
41-48		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
49-60		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
61-70		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
71-86		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
87+		.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOTAL		.0	7	21	6	2	.0	36	.0	1	18	3	2	.0	24
PCT		.0	3.7	11.2	3.2	1.1	.0	19.1	.0	.5	9.6	1.6	1.1	.0	12.8

HGT		W										NW		48+	TOTAL
		1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47		
<1		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
1-2		.0	.0	.0	.0	.0	.0	0	.0	.5	.0	.0	.0	.0	1
3-4		.0	.5	1.6	.5	.0	.0	5	.0	.0	.5	.0	.0	.0	1
5-6		.0	.5	1.1	.5	.0	.0	4	.0	.5	1.1	.5	.0	.0	4
7		.0	.5	.5	.5	.0	.0	2	.0	.0	.0	1.6	.0	.0	3
8-9		.0	.0	.5	.5	.0	.0	2	.0	.0	.0	.0	.0	.0	0
10-11		.0	.0	1.1	1.6	1.6	.0	8	.0	.0	.5	1.1	.0	.0	2
12		.0	.5	.5	.5	.5	.0	3	.0	.0	.5	.5	.0	.0	1
13-16		.0	.5	.0	1.1	.5	.0	4	.0	.0	.5	.5	.0	.0	2
17-19		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
20-22		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
23-25		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL		.0	4	10	9	5	.0	28	.0	2	5	7	0	.0	14
PCT		.0	2.1	5.3	4.8	2.7	.0	14.9	.0	1.1	2.7	3.7	.0	.0	7.4

		GRAND TOTAL													
		1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
1-2		.0	.0	.0	.5	.0	.0	5	.0	.5	.0	.0	.0	.0	1
3-4		.0	.5	1.6	.5	.0	.0	2	.0	.0	.5	.0	.0	.0	1
5-6		.0	.5	1.1	.5	.0	.0	4	.0	.5	1.1	.5	.0	.0	4
7		.0	.5	.5	.5	.0	.0	2	.0	.0	.0	1.6	.0	.0	3
8-9		.0	.0	.5	.5	.0	.0	2	.0	.0	.0	.0	.0	.0	0
10-11		.0	.0	1.1	1.6	1.6	.0	8	.0	.0	.5	1.1	.0	.0	2
12		.0	.5	.5	.5	.5	.0	3	.0	.0	.5	.5	.0	.0	1
13-16		.0	.5	.0	1.1	.5	.0	4	.0	.0	.5	.5	.0	.0	2
17-19		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
20-22		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
23-25		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
26-32		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+		.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL		.0	4	10	9	5	.0	28	.0	2	5	7	0	.0	14
PCT		.0	2.1	5.3	4.8	2.7	.0	14.9	.0	1.1	2.7	3.7	.0	.0	7.4



DECEMBER

PERIOD: (PRIMARY)  
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TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)								TOTAL DBS
	0-3	4-10	11-21	22-33	34-47	48+			
<1	2.6	2.6	.0	.0	.0	.0			10
1-2	.0	5.2	.5	.0	.0	.0			11
3-4	.0	1.6	12.4	1.6	.0	.0			30
5-6	.0	2.6	13.0	2.6	1.0	.0			37
7	.0	.5	4.1	4.7	1.6	.0			21
8-9	.0	.0	5.2	2.6	1.0	.0			17
10-11	.0	.0	7.8	6.2	1.6	.0			30
12	.0	.0	2.1	1.6	1.6	.0			10
13-16	.0	.5	4.1	7.3	1.0	.0			25
17-19	.0	.0	.0	.0	1.0	.0			2
20-22	.0	.0	.0	.0	.0	.0			0
23-25	.0	.0	.0	.0	.0	.0			0
26-32	.0	.0	.0	.0	.0	.0			0
33-40	.0	.0	.0	.0	.0	.0			0
41-48	.0	.0	.0	.0	.0	.0			0
49-60	.0	.0	.0	.0	.0	.0			0
61-70	.0	.0	.0	.0	.0	.0			0
71-86	.0	.0	.0	.0	.0	.0			0
87+	.0	.0	.0	.0	.0	.0			0
TOTAL	5	25	55	51	17	0			193
PCT	2.6	13.0	49.2	26.4	8.8	.0			100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-16	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT	
<6	.0	2.9	6.2	4.6	.8	1.1	.3	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	60	4
6-7	.0	.0	1.3	3.2	2.9	3.5	4.8	.8	2.1	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	72	8
8-9	.0	.8	1.9	1.3	2.1	1.1	4.8	1.6	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	66	8
10-11	.0	.3	.0	.5	.5	.0	.8	.3	.3	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	13	10
12-13	.0	.0	.0	.0	.3	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2	11
>13	.0	.0	.0	.0	.0	.0	.0	.0	.5	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3	14
INDET	42.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	157	0
TOTAL	157	15	35	36	25	21	40	11	27	6	0	0	0	0	0	0	0	0	0	0	373	4
PCT	42.1	4.0	9.4	9.7	6.7	5.6	10.7	2.9	7.2	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	

PERIOD: (PRIMARY) 1943-1970  
(OVER-ALL) 1901-1970

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TABLE 1

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY WIND DIRECTION

WIND DIR	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE				HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA				TOTAL OBS
				FRZG PCPN	SNOW	OTHER FRZN PCPN	FOG PCPN					SMOKE HAZE	DUST BLWG	NO SIG WEA		
N	.4	*	.4	.0	.6	*		*	1.4	217	.0	.8	*	.0	4.3	1024
NNE	.3	*	.2	.0	.3	.0		.0	.8	123	.0	.4	*	*	2.5	575
NE	.4	.1	.2	.0	.6	.0		*	1.3	203	*	.8	*	*	3.0	810
ENE	.4	*	.4	.0	.2	.0		*	1.0	165	*	.5	.1	.0	2.3	627
E	.8	.1	.7	*	.4	*		*	2.0	310	.0	1.0	.1	.0	3.7	1063
ESE	.6	*	.5	.0	.3	.0		.0	1.3	210	.0	.8	*	.0	2.3	705
SE	1.0	*	.5	.0	.2	.0		*	1.8	284	.0	1.1	.1	*	2.4	843
SSE	.7	*	.4	.0	.1	.0		.0	1.2	194	.0	1.1	*	*	2.0	692
S	1.1	.1	.9	.0	.2	.0		*	2.3	360	*	2.0	.1	*	4.0	1336
SSW	.7	*	.7	.0	.1	.0		.0	1.4	221	.0	1.2	.1	*	3.1	905
SW	.8	.1	.7	.0	.2	.0		*	1.7	273	.0	2.2	.2	.0	4.6	1367
WSW	.3	.1	.4	.0	.2	.0		*	.9	148	.0	1.2	*	.0	5.0	1124
W	.4	.1	.6	*	.4	.0		*	1.5	244	.0	1.5	.1	*	7.7	1704
WNW	.2	.1	.3	.0	.3	.0		*	.8	122	.0	.5	*	*	4.1	860
NW	.2	.1	.2	.0	.5	*		*	1.0	156	.0	.6	*	*	4.0	886
NNW	.2	*	.2	.0	.3	.0		.0	.6	102	.0	.5	*	*	3.3	707
VAP	.0	.0	.0	.0	.0	.0		.0	.0	0	.0	.0	.0	.0	.0	0
CALM	.1	*	.2	.0	*	.0		.0	.3	52	.0	.8	.0	.0	2.5	572
TOT OBS	1361	141	1177	2	761	5	18	3384			3	2648	146	13	9606	15800
TOT PCT	8.6	.9	7.4	*	4.8	*	.1	21.4			*	16.8	.9	.1	60.8	100.0

TABLE 2

PERCENTAGE FREQUENCY OF WEATHER OCCURRENCE BY HOUR

HOUR (GMT)	RAIN	RAIN SHWR	DRZL	PRECIPITATION TYPE				HAIL	PCT FREQ PCPN AT DB TIME	TOTAL PCPN OBS	THDR LTNG	OTHER WEATHER PHENOMENA						TOTAL OBS
				FRZG PCPN	SNOW	OTHER FRZN PCPN	FOG WD PCPN					SMOKE HAZE	DUST BLWG	NO DUST	SIG WEA			
00003	7.8	.6	5.7	.0	5.7	*	.2	19.6	844	*	18.0	.8	.1	61.5	4310			
06009	6.6	1.1	7.5	.0	5.4	*	.1	22.2	893	.0	16.8	1.4	.1	59.5	4025			
12015	9.0	.9	8.3	*	3.2	.0	.1	21.0	766	.0	12.6	.4	*	65.9	3644			
18021	8.8	1.0	8.3	*	4.9	*	.1	22.6	911	*	18.9	1.1	.1	57.2	4026			
TOT	1366	144	1186	2	778	5	18	3414		3	2676	148	13	9751	16005			
PCT	8.5	.9	7.4	*	4.9	*	.1	21.3		*	16.7	.9	.1	60.9	100.0			

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TABLE 3

PERCENTAGE FREQUENCY OF WIND DIRECTION BY SPEED AND BY HOUR

WIND DIR	WIND SPEED (KNOTS)					48+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-3	4-10	11-21	22-33	24-47					00	03	06	09	12	15	18	21
N	.5	2.3	2.7	1.1	.2	*	1447	6.8	14.4	7.6	6.0	7.2	7.1	6.3	5.9	6.0	7.1
NNE	.2	1.2	1.4	.8	.2	*	795	3.8	16.0	3.5	4.2	4.2	3.5	4.1	2.5	4.2	3.4
NE	.4	2.2	2.0	.9	.2	*	1195	5.7	13.8	6.2	4.0	4.9	6.5	5.0	4.7	5.1	7.2
ENE	.1	1.1	1.4	.8	.2	*	764	3.6	16.9	3.0	4.1	3.9	3.8	3.9	4.4	3.7	3.3
E	.4	2.4	2.5	1.3	.3	*	1467	6.9	15.2	7.3	7.5	5.7	8.0	6.2	7.8	6.4	7.8
ESE	.2	1.4	1.6	.7	.2	*	855	4.0	15.3	3.7	5.4	4.0	4.1	4.7	4.9	3.9	3.3
SE	.5	1.6	2.3	.9	.2	*	1153	5.5	14.8	6.0	4.9	4.9	6.5	5.0	5.5	4.5	6.0
SSE	.2	1.1	1.7	.1	.2	*	814	3.9	15.9	3.6	4.2	.	3.6	4.7	4.2	4.2	2.6
S	.6	2.6	3.2	1.1	.4	*	1675	7.9	14.7	8.1	8.3	5.1	7.7	7.4	6.6	8.6	7.9
SSW	.2	1.7	2.4	.9	.2	*	1152	5.4	14.9	5.2	5.1	5.7	5.2	5.5	7.9	5.6	5.0
SW	.7	3.3	3.7	1.2	.3	*	1938	9.2	13.5	8.8	10.2	8.1	11.3	8.5	10.4	6.1	10.5
WSW	.2	2.2	2.9	1.1	.2	*	1403	6.6	15.4	6.5	6.6	7.3	5.1	8.0	7.8	7.0	5.0
W	.7	3.4	4.6	1.5	.4	*	2247	10.6	14.7	11.0	9.2	11.4	9.6	10.8	9.2	11.6	9.7
WNW	.2	1.8	2.2	.9	.2	*	1122	5.3	14.7	5.0	8.0	5.7	4.1	5.5	5.2	6.3	4.1
NW	.5	2.3	2.8	.8	.2	*	1379	6.5	13.5	6.6	5.9	6.6	7.3	5.3	6.6	5.9	8.1
NNW	.2	1.5	2.0	.7	.1	.0	955	4.5	14.6	4.0	4.6	4.9	4.0	5.0	4.8	5.2	4.2
VAR	#	.0	.0	.0	.0	.0	1	#	2.0	#	.0	.0	.0	.0	.0	.0	.0
CALM	3.7	8277	8277	3214	739	68	776	3.7	.0	4.0	1.9	3.5	2.8	4.0	1.6	3.8	4.8
TOT OBS	2036	6804	39.2	15.2	3.5	.3	21138	100.0	14.2	5035	904	3099	2480	3180	912	3068	2460
TOT PCT	9.6	32.2								100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 3A

WIND DIR	WIND SPEED (KNOTS)				41+	TOTAL OBS	PCT FREQ	MEAN SPD	HOUR (GMT)							
	0-6	7-16	17-27	28-40					00	03	06	09	12	15	18	21
N	2.1	4.6	2.8	1.0	.1	2242	10.6	15.0	11.0	10.2	11.4	10.5	10.4	8.4	10.2	10.5
NE	1.9	4.0	2.4	.8	.2	1959	9.3	15.0	9.2	8.1	8.8	10.3	8.9	9.1	8.8	10.5
E	2.1	4.8	2.8	1.2	.2	2322	11.0	15.2	11.0	12.9	9.7	12.1	10.8	12.7	10.3	11.2
SE	1.7	4.0	2.7	.8	.1	1967	9.3	15.3	9.6	9.1	8.9	10.1	9.8	9.6	8.7	8.6
S	2.6	5.7	3.9	.9	.2	2827	13.4	14.8	13.2	13.4	13.7	12.9	12.9	14.5	14.2	12.8
SW	3.0	7.4	4.2	1.0	.2	3341	15.8	14.3	15.3	16.8	15.4	16.4	16.5	18.2	15.0	15.5
W	3.0	7.2	4.3	1.3	.2	3369	15.9	14.7	16.0	17.1	17.1	13.7	16.3	14.4	17.9	13.8
NW	2.3	5.1	3.0	.7	.1	2334	11.0	14.0	10.6	10.5	11.4	11.3	10.3	11.4	11.1	12.3
VAR	#	.0	.0	.0	.0	1	#	2.0	#	.0	.0	.0	.0	.0	.0	.0
CALM	3.7	9038	5498	1627	243	776	3.7	.0	4.0	1.9	3.5	2.8	4.0	1.6	3.8	4.8
TOT OBS	4732	42.8	26.0	7.7	1.1	21138	100.0	14.2	5035	904	3099	2480	3180	912	3068	2460
TOT PCT	22.4						100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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TABLE 4

HOUR	PERCENTAGE FREQUENCY OF WIND SPEED BY HOUR (GMT)						
	1-3	4-10	11-21	22-33	34-47	48+	
0000	6.1	32.6	39.1	14.7	3.5	.4	3.7
0600	7.2	33.1	37.6	15.3	3.2	.4	3.2
1200	3.2	29.6	44.1	15.5	3.9	.3	3.5
1800	6.6	32.8	37.2	15.4	3.5	.2	4.3
TOT	1259	6804	8277	3214	739	68	776
PCT	6.0	32.2	39.2	15.2	3.5	.3	3.7

TABLE 5

PCT FREQ OF TOTAL CLOUD AMOUNT (EIGHTHS)

WIND DIR	BY WIND DIRECTION						
	0-2	3-4	5-7	8-5	TOTAL	MEAN	
N	.3	.5	1.8	3.9	866	6.9	
NNE	.1	.2	1.0	2.6	521	7.2	
NE	.2	.2	1.1	3.3	639	7.2	
ENE	.1	.1	.6	2.9	492	7.5	
E	.2	.2	.9	5.5	895	7.5	
ESE	.1	.1	.5	3.7	580	7.5	
SE	.1	.1	.5	4.2	665	7.6	
SSE	.2	.1	.5	3.5	567	7.5	
S	.2	.2	1.2	6.6	1087	7.5	
SSW	.2	.3	1.1	3.9	734	7.1	
SW	.5	.5	1.6	5.5	1077	7.0	
WSW	.4	.5	1.9	4.6	572	6.8	
W	.9	.9	2.9	6.7	1501	6.7	
WNW	.4	.5	1.6	3.3	777	6.7	
NW	.3	.4	1.7	3.2	752	6.7	
NNW	.3	.4	1.4	2.8	648	6.7	
VAR	.0	.0	.0	.0	0	.0	
CALM	.2	.2	.6	2.7	502	7.1	
TOT OBS	640	724	2783	9128	13275	7.1	
TOT PCT	4.8	5.5	21.0	68.8	100.0		

TABLE 6

PERCENTAGE FREQUENCY OF CEILING HEIGHTS (FT,NH &gt;4/8)

WIND DIR	AND OCCURRENCE OF NH <5/8 BY WIND DIRECTION												
	000	150	300	600	1000	2000	3500	5000	6500	8000+	NH <5/8	TOTAL	
N	.6	.1	.3	.6	1.5	1.5	.5	.1	.1	.1	.2	866	
NNE	.4	.1	.2	.3	1.1	1.1	.2	.1	.1	.1	.5	521	
NE	.6	.1	.2	.4	1.3	1.0	.3	.1	.1	.1	.7	639	
ENE	.5	.1	.2	.3	1.1	.8	.3	.1	.1	.1	.4	492	
E	1.1	.1	.2	.7	1.8	1.4	.4	.1	.1	.1	.8	895	
ESE	.8	.1	.2	.4	1.3	.9	.2	.1	.1	.1	.5	580	
SE	1.1	.1	.2	.4	1.6	.8	.3	.1	.1	.1	.4	665	
SSE	1.0	.1	.2	.3	1.2	.6	.3	.1	.1	.1	.5	567	
S	2.0	.1	.4	.6	2.2	1.4	.5	.1	.1	.1	.8	1087	
SSW	1.0	.1	.2	.6	1.5	.8	.3	.1	.1	.1	.9	734	
SW	1.4	.1	.5	.7	2.1	1.2	.5	.1	.1	.1	1.4	1077	
WSW	.9	.1	.2	.6	2.0	1.1	.6	.1	.1	.1	1.5	972	
W	1.1	.2	.2	1.0	2.9	2.1	.8	.1	.1	.1	2.6	1501	
WNW	.4	.1	.2	.5	1.6	1.2	.5	.1	.1	.1	1.3	777	
NW	.4	.1	.1	.4	1.7	1.0	.5	.2	.1	.1	1.2	752	
NNW	.5	.1	.2	.2	1.4	.9	.4	.1	.1	.1	1.1	648	
VAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	
CALM	.5	.1	.4	.2	1.5	.6	.1	.1	.1	.1	.6	502	
TOT OBS	1923	175	482	1096	3688	2453	882	172	104	113	2187	13275	
TOT PCT	14.5	1.3	3.6	8.3	27.8	18.5	6.6	1.3	.8	.9	16.5	100.0	

TABLE 7

CUMULATIVE PCT FREQ OF SIMULTANEOUS OCCURRENCE  
OF CEILING HEIGHT (NH >4/8) AND VSBY (NM)

CEILING (FEET)	= OR >10	= OR >5	= OR >2	= OR >1	= OR >1/2	= OR >1/4	= OR >50YD	= OR >0
= OR >6500	.8	1.5	1.6	1.6	1.6	1.7	1.7	1.7
= OR >5000	1.4	2.7	2.9	2.9	3.0	3.0	3.0	3.0
= OR >3500	4.0	8.4	9.4	9.6	9.6	9.6	9.7	9.7
= OR >2000	11.6	23.8	26.7	27.6	28.0	28.2	28.3	28.3
= OR >1000	19.9	44.0	51.8	54.5	55.3	55.8	56.1	56.2
= OR >600	21.7	48.8	58.5	62.1	63.3	63.9	64.3	64.4
= OR >300	22.0	50.2	60.8	65.0	66.5	67.4	68.0	68.0
= OR >150	22.1	50.5	61.3	65.8	67.5	68.6	69.3	69.3
= OR > 0	22.5	51.8	63.8	69.7	72.8	77.7	82.7	83.3
TOTAL	2999	6899	8495	9277	9694	10342	11012	11086

TOTAL NUMBER OF OBS: 13309

PCT FREQ NH <5/8: 16.7

TABLE 7A

PERCENTAGE FREQ OF LOW CLOUDS (EIGHTHS)

	0	1	2	3	4	5	6	7	8	OBSCD	TOTAL OBS
2.1	1.9	4.5	3.7	3.9	4.8	8.6	8.6	49.6	12.3	14661	

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TABLE 8

PERCENT FREQ OF WIND DIRECTION VS OCCURRENCE OR NON OCCURRENCE OF PRECIPITATION  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
PCP	.1	.1	.1	.1	.2	.2	.3	.2	.3	.1	.2	.1	.2	.1	.1	.1	.0	*	368	2.3
NO PCP	.4	.2	.4	.3	.6	.4	.6	.7	1.3	.7	1.0	.6	.8	.3	.3	.3	.0	.5	1467	9.3
TOTAL	69	41	73	64	120	101	148	142	242	131	191	111	147	49	53	62	0	91	1835	11.7
PCP	.1	.1	.2	.2	.2	.3	.2	.2	.3	.1	.3	.1	.2	.1	.1	.1	.0	*	440	2.8
NO PCP	.1	.1	.1	.1	.2	.1	.1	.2	.3	.1	.4	.2	.2	.1	*	*	.0	*	363	2.3
TOTAL	32	26	47	43	62	64	47	58	94	43	99	52	70	22	15	18	0	11	803	5.1
PCP	.3	.2	.2	.2	.4	.3	.4	.2	.6	.4	.4	.1	.2	.2	.2	.1	.0	.1	690	4.4
NO PCP	.2	.1	.2	.1	.2	.1	.2	.2	.4	.3	.6	.3	.4	.2	.2	.1	.0	.1	620	3.9
TOTAL	73	46	69	56	104	66	89	69	147	98	146	70	94	54	61	36	0	32	1310	8.3
PCP	.4	.2	.4	.3	.7	.3	.5	.4	.6	.5	.6	.2	.4	.2	.2	.2	.0	.1	955	6.1
NO PCP	.4	.3	.4	.4	.5	.3	.4	.4	.8	.6	.9	.7	1.0	.4	.5	.3	.0	.2	1360	8.7
TOTAL	135	69	123	104	186	103	142	121	226	171	232	146	215	108	104	75	0	55	2315	14.7
PCP	.4	.2	.4	.2	.4	.2	.4	.2	.4	.3	.3	.3	.5	.2	.3	.2	.0	.1	778	5.0
NO PCP	1.8	1.0	1.2	1.1	1.8	1.1	1.1	.9	2.0	1.3	2.1	2.3	3.2	1.7	1.6	1.3	.0	1.3	4205	26.8
TOTAL	342	201	244	201	347	201	232	168	379	249	372	410	587	298	310	229	0	213	4983	31.7
PCP	.1	*	.1	*	.1	*	.1	*	.1	*	.1	.1	.1	*	.1	.1	.0	*	177	1.1
NO PCP	2.2	1.2	1.5	1.0	1.4	1.0	1.1	.8	1.4	1.3	1.9	2.0	3.5	2.0	2.0	1.7	.0	1.0	4278	27.2
TOTAL	366	194	252	159	237	164	179	131	235	206	320	326	576	322	337	284	0	167	4455	28.4
TOTAL	1017	577	808	627	1056	699	837	689	1323	898	1360	1115	1689	853	880	704	0	569	15701	100.0
PCT	6.5	3.7	5.1	4.0	6.7	4.5	5.3	4.4	8.4	5.7	8.7	7.1	10.8	5.4	5.6	4.5	.0	3.6	100.0	

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TABLE 9

PERCENT FREQ OF WIND DIRECTION VS WIND SPEED  
WITH VARYING VALUES OF VISIBILITY

VSBY (NM)	SPD KTS	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	CALM	TOTAL	PCT
<1/2	0-3	.1	*	*	*	.1	*	.1	*	.1	*	.1	*	.1	*	*	*	.0	.4	237	1.1
	4-10	.2	.1	.2	.1	.3	.2	.2	.2	.3	.2	.3	.2	.3	.1	.1	.2	.0		677	3.2
	11-21	.1	.1	.1	.1	.2	.1	.4	.6	.3	.3	.4	.3	.4	.1	.1	.1	.0		816	3.9
	22+	*	.1	.1	.1	.1	.1	.1	.1	.2	.1	.1	*	.1	*	*	*	.0		234	1.1
	TOTAL	78	47	83	70	132	105	149	147	247	134	202	119	168	57	62	71	0	93	1964	9.4
1/2<1	0-3	*	*	*	.0	*	.0	*	*	*	*	*	*	*	.0	*	.0	.0	.1	65	.3
	4-10	*	*	.1	*	.1	.1	*	.1	.1	*	.2	.1	.1	*	*	.4	.0		240	1.1
	11-21	*	*	.1	.1	.1	.1	.1	.1	.2	.1	.2	.1	.2	.1	*	.1	.0		356	1.7
	22+	.1	*	.1	.1	.1	.1	.1	.1	.2	.1	.1	.1	.1	*	*	*	.0		269	1.3
	TOTAL	34	29	62	46	73	69	53	62	112	48	111	61	83	28	20	25	0	14	930	4.4
1<2	0-3	.1	*	*	*	.1	*	*	*	.1	*	.1	*	.1	*	.1	*	.0	.2	159	.8
	4-10	.1	.1	.2	.1	.1	.1	.2	.1	.2	.1	.3	.1	.2	.1	.1	.1	.0		476	2.3
	11-21	.2	.1	.1	.1	.2	.1	.2	.2	.3	.3	.2	.2	.3	.1	.1	.1	.0		618	3.0
	22+	.1	.1	.1	.1	.2	.1	.1	.1	.3	.1	.2	.1	.1	.1	.1	.1	.0		461	2.2
	TOTAL	102	59	94	64	132	80	111	81	182	120	206	97	134	70	86	52	0	44	1714	8.2
2<5	0-3	.1	*	*	*	*	.1	*	*	.1	.1	.1	*	.1	*	*	*	.0	.4	254	1.2
	4-10	.3	.2	.3	.1	.3	.2	.3	.2	.4	.3	.5	.3	.4	.2	.3	.1	.0		893	4.3
	11-21	.3	.2	.3	.2	.5	.3	.4	.3	.5	.4	.7	.3	.6	.3	.3	.3	.0		1193	5.7
	22+	.3	.2	.3	.3	.4	.2	.3	.2	.3	.3	.3	.2	.3	.2	.2	.1	.0		854	4.1
	TOTAL	200	115	193	127	252	134	196	142	281	220	327	198	294	147	168	109	0	91	3194	15.2
5<10	0-3	.1	*	.1	*	.1	.1	.1	.1	.2	*	.2	.1	.2	.1	.1	.1	.0	1.3	199	2.9
	4-10	.7	.4	.6	.3	.9	.4	.4	.2	.9	.6	1.0	.7	1.1	.6	.7	.5	.0		2088	10.0
	11-21	1.0	.5	.7	.5	.8	.5	.6	.4	1.0	.7	1.1	1.0	1.6	.8	1.1	.7	.0		2678	12.8
	22+	.5	.4	.3	.3	.5	.2	.4	.3	.4	.3	.4	.6	.7	.3	.3	.3	.0		1322	6.3
	TOTAL	478	280	357	245	470	246	318	205	495	339	560	502	761	377	458	317	0	279	6687	31.9
10+	0-3	.3	.1	.2	*	.1	*	.2	*	.1	.1	.2	.1	.2	.1	.2	.1	*	1.2	711	3.4
	4-10	1.0	.5	.8	.4	.7	.4	.5	.3	.7	.5	1.1	.7	1.3	.7	1.1	.6	.0		2374	11.3
	11-21	1.0	.5	.7	.4	.7	.4	.6	.3	.6	.6	.9	.9	1.6	.9	1.1	.8	.0		2531	12.1
	22+	.3	.2	.2	.1	.3	.2	.2	.1	.2	.1	.3	.3	.6	.4	.3	.2	.0		843	4.0
	TOTAL	543	258	399	208	393	213	315	173	342	280	522	416	780	429	569	368	1	250	6459	30.8
	TOTAL	1435	788	1188	760	1452	847	1142	810	1659	1141	1928	1393	2220	1108	1363	942	1	771	20948	100.0
	PCT	6.9	3.8	5.7	3.6	6.9	4.0	5.5	3.9	7.9	5.4	9.2	6.6	10.6	5.3	6.5	4.5	*	3.7	100.0	

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TABLE 10

PERCENT FREQUENCY OF CEILING HEIGHTS (FEET,NH >4/8),AND  
OCCURRENCE OF NH <5/8 BY HOUR

HOUR (GMT)	000 149	150 299	300 599	600 999	1000 1999	2000 3499	3500 4999	5000 6499	5500 7999	8000+	TOTAL ANY HGT	NH <5/8 TOTAL OBS
00003	12.8	.9	3.6	8.3	27.3	19.1	6.6	1.2	.9	1.1	81.8	18.2 3663
06009	12.9	1.3	3.8	8.4	27.6	18.5	7.2	1.3	.7	.8	82.6	17.4 3350
12015	16.9	1.4	3.5	8.0	25.1	17.5	5.9	1.1	.6	.9	80.8	19.2 3282
18021	15.0	1.6	3.4	7.7	29.6	18.1	6.6	1.6	.8	.7	85.0	15.0 3284
TOT	1948	176	485	1101	3720	2486	894	176	105	117	11208	2371 13579
PCT	14.3	1.3	3.6	8.1	27.4	18.3	6.6	1.3	.8	.9	82.5	17.5 100.0

TABLE 11

PERCENT FREQUENCY VSBY (NM) BY HOUR

HOUR (GMT)	<1/2	1/2<1	1<2	2<5	5<10	10+	TOTAL OBS
00003	9.7	3.2	5.6	11.6	33.4	36.1	3583
06009	10.2	3.1	5.8	11.5	33.8	35.5	3289
12015	10.8	3.7	6.4	15.2	35.0	28.8	3203
18021	11.8	3.0	6.5	13.0	34.8	31.0	3234
TOT	1413	432	808	1702	4556	4398	13309
PCT	10.6	3.2	6.1	12.8	34.2	33.0	100.0

TABLE 12

CUMULATIVE PCT FREQ OF RANGES OF VSBY (NM) AND/OR  
CEILING HGT (FEET,NH >4/8),BY HOUR

HOUR (GMT)	<150 <50YD	<600 <1	<1000 <5	1000+ AND5+	NH <5/8 AND 5+	TOTAL OBS
00003	12.4	19.2	37.6	46.3	16.1	3583
06009	12.7	20.1	38.8	45.2	16.0	3289
12015	16.7	24.8	44.8	38.4	16.8	3203
18021	15.0	22.2	41.6	45.6	12.8	3234
TOT	1882	2863	5402	5852	2055	13309
PCT	14.1	21.5	40.6	44.0	15.4	100.0



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TABLE 13

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY TEMP

TEMP F	0-29	30-39	40-49	50-59	60-69	70-79	80-89	90-100	TOTAL OBS	PCT FREQ
65/69	.0	.0	.0	.0	.0	*	.0	.0	3	*
60/64	.0	.0	.0	*	.2	.3	.1	*	61	.6
55/59	.0	.0	.0	.1	.2	.9	1.3	.8	336	3.3
50/54	.0	*	*	.1	.5	1.0	5.1	6.7	1374	13.3
45/49	.0	.0	*	.2	.6	3.2	6.8	19.5	3132	30.4
40/44	.0	.0	*	.2	1.2	3.2	6.2	14.6	2620	25.4
35/39	.0	.0	.0	.3	.9	2.8	5.0	9.0	1855	18.0
30/34	.0	.0	.0	*	.4	1.1	2.3	3.6	767	7.4
25/29	.0	.0	.0	.0	*	.1	.4	.8	134	1.3
20/24	.0	.0	.0	.0	.0	*	.1	.1	21	.2
TOTAL	0	1	6	96	420	1302	2797	5681	10303	100.0
PCT	.0	*	.1	.9	4.1	12.6	27.1	55.1		

TABLE 14

PERCENT FREQUENCY OF WIND DIRECTION BY TEMP

	N	NE	E	SE	S	SW	W	NW	VAR	CALM
65/69	.0	.0	.0	.0	.0	.0	.0	*	.0	*
60/64	.1	*	*	*	.1	.1	.1	.1	.0	*
55/59	.3	.2	.2	.2	.6	.8	.6	.2	.0	*
50/54	.8	.8	.6	1.3	2.4	3.3	1.9	1.2	.0	.3
45/49	2.4	2.2	2.7	3.5	5.5	5.7	4.5	3.0	.0	1.0
40/44	2.7	2.3	3.8	2.7	3.2	3.4	3.9	2.9	.0	.6
35/39	2.2	2.3	3.0	1.7	1.6	2.2	2.5	2.3	.0	.2
30/34	1.3	1.3	.7	.4	.3	.7	1.1	1.5	*	.1
25/29	.5	.3	*	*	*	*	.1	.3	.0	*
20/24	.1	*	.0	.0	.0	.0	*	.1	.0	.0
TOTAL	1068	965	1145	1017	1399	1669	1511	1188	1	340
PCT	10.4	9.4	11.1	9.9	13.6	16.2	14.7	11.5	*	3.3

TABLE 15

MEANS, EXTREMES AND PERCENTILES OF TEMP (DEG F) BY HOUR

HOUR (GMT)	MAX	99%	95%	50%	5%	1%	MIN	MEAN	TOTAL OBS
00003	66	59	54	43	32	28	21	43.5	5786
06009	66	60	54	43	32	27	22	43.1	5474
12015	66	53	50	41	32	28	23	41.3	3994
18021	62	56	52	42	31	27	22	41.9	5433
TOT	66	58	53	43	32	27	21	42.5	20687

TABLE 16

PERCENT FREQUENCY OF RELATIVE HUMIDITY BY HOUR

HOUR (GMT)	0-29	30-59	60-69	70-79	80-89	90-100	MEAN	TOTAL OBS
00003	.0	1.1	5.1	13.2	28.2	52.3	.88	3076
06009	.0	1.3	4.4	13.1	27.9	53.3	.88	2873
12015	.0	1.3	2.4	10.3	25.7	60.4	.90	1415
18021	.0	.5	3.5	12.7	26.2	57.1	.89	2985
TOT	0	103	421	1309	2816	5700	.89	10349

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TABLE 17

PCT FREQ OF AIR TEMPERATURE (DEG F) AND THE OCCURRENCE OF FOG (WITHOUT PRECIPITATION)  
VS AIR-SEA TEMPERATURE DIFFERENCE (DEG F)

AIR-SEA TMP DIF	21	25	29	33	37	41	45	49	53	57	61	65	TOT	W FOG	WD FOG
20/22	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	*	*	5	*	*
17/19	.0	.0	.0	.0	.0	.0	.0	.0	.0	*	.1	.0	9	*	*
14/16	.0	.0	.0	.0	.0	.0	.0	.1	.1	.1	*	*	47	.1	.2
11/13	.0	.0	.0	.0	.0	.0	*	.3	.3	.4	*	.0	145	.4	.8
9/10	.0	.0	.0	.0	.0	*	.4	.7	.5	.2	*	.0	233	.6	1.3
7/8	.0	.0	.0	.0	.0	.2	1.0	1.3	.6	.1	.0	.0	389	1.0	2.1
6	.0	.0	.0	.0	*	.3	.7	.9	.2	*	.0	.0	267	.7	1.4
5	.0	.0	.0	.0	*	.6	1.5	1.4	.2	*	.0	.0	477	1.1	2.6
4	.0	.0	.0	.0	.3	1.5	2.7	1.2	.3	*	.0	.0	750	1.4	4.5
3	.0	.0	.0	.0	1.3	3.8	5.5	1.2	.2	*	.0	.0	720	1.4	4.3
2	.0	.0	.0	.1	1.7	2.6	3.6	.8	.1	.0	.0	.0	1538	2.6	9.6
1	.0	.0	.0	.7	5.3	7.6	6.1	1.5	.1	.0	.0	.0	1143	2.0	7.0
0	.0	.0	*	.5	2.5	1.7	2.0	.3	*	.0	.0	.0	2696	3.5	17.8
-1	.0	.0	*	1.9	3.1	1.8	1.4	.3	.0	.0	.0	.0	894	.9	6.2
-2	.0	.0	.1	1.5	1.1	.4	.4	.1	.0	.0	.0	.0	1066	1.1	7.3
-3	.0	.0	.4	2.0	.5	.4	.4	*	.0	.0	.0	.0	456	.3	3.3
-4	.0	.0	.5	1.5	.5	.2	.1	*	.0	.0	.0	.0	521	.3	3.8
-5	.0	*	.9	.6	.2	.1	.1	*	.0	.0	.0	.0	358	.1	2.7
-6	.0	.2	1.7	.7	.2	*	.0	.0	.0	.0	.0	.0	232	*	1.8
-7/-8	.0	.5	.7	.2	.0	*	.0	.0	.0	.0	.0	.0	364	*	2.8
-9/-10	.0	.5	.2	.0	*	*	.0	.0	.0	.0	.0	.0	199	*	1.5
-11/-13	.1	.5	.2	*	*	*	.0	.0	.0	.0	.0	.0	109	.0	.9
-14/-16	.2	*	*	*	.0	.0	.0	.0	.0	.0	.0	.0	30	*	.2
TOTAL	32	176	578	1259	2212	2905	3598	1385	363	114	21	5	12648	2253	10395
PCT	.3	1.4	4.6	10.0	17.5	23.0	28.4	11.0	2.9	.9	.2	*	100.0	17.8	82.2

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TABLE 18

PCT FREQ OF WIND SPEED (KTS) AND DIRECTION VERSUS SEA HEIGHTS (FT)

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.2	.6	.0	.0	.0	.0	42	.2	.6	.0	.0	.0	.0	39
1-2	.1	1.8	.9	.0	.0	.0	148	.1	.8	.8	.0	.0	.0	91
3-4	.0	.8	1.4	.1	.0	.0	120	*	.6	.9	.2	.0	.0	88
5-6	.0	.1	.9	.2	.1	.0	65	.0	.1	.8	.2	*	.0	56
7	.0	*	.7	.5	*	.0	73	.0	.0	.5	.3	.0	.0	42
8-9	.0	.0	.2	.5	.1	.0	41	.0	*	.2	.2	*	.0	21
10-11	.0	.0	.2	.4	.1	*	39	.0	.0	.1	.2	*	.0	17
12	.0	.0	.1	.2	.1	.0	17	.0	.0	*	.1	*	.0	6
13-16	.0	.0	.0	.2	.1	.0	19	.0	.0	*	.2	.1	.0	18
17-19	.0	.0	.0	.2	.1	.0	5	.0	.0	.0	.3	.1	.0	19
20-22	.0	.0	.0	.1	*	.0	2	.0	.0	.0	*	.1	.0	8
23-25	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	*	.0	2
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	16	172	233	122	27	1	571	16	108	171	87	23	2	407
PCT	.3	3.3	4.5	2.3	.5	*	10.9	.3	2.1	3.3	1.7	.4	*	7.8

HGT	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+	TOTAL
<1	.2	.7	.0	.0	.0	.0	49	.1	.6	.0	.0	.0	.0	41
1-2	.1	2.1	1.3	.0	.0	.0	182	*	1.3	1.2	.0	.0	.0	133
3-4	.0	.5	1.5	.2	.0	.0	114	.0	.7	2.1	.2	.0	.0	160
5-6	*	.1	.8	.5	.0	.0	73	*	.1	.9	.4	.1	.0	73
7	.0	.0	.5	.5	*	.0	52	.0	*	.3	.5	.1	.0	49
8-9	.0	.0	.1	.2	*	.0	15	.0	.0	.1	.5	.1	.0	38
10-11	.0	.0	.1	.3	.1	.0	26	.0	.0	.1	.1	*	*	14
12	.0	.0	*	.2	*	.0	11	.0	.0	*	.1	.1	.0	15
13-16	.0	.0	.1	.3	.1	.0	27	.0	.0	.2	.3	.1	.1	33
17-19	.0	.0	*	.1	*	.0	8	.0	.0	*	*	.0	.0	2
20-22	.0	.0	*	.1	.1	.0	9	.0	.0	*	*	*	.0	5
23-25	.0	.0	.0	.0	*	.0	1	.0	.0	.0	.0	.0	*	1
26-32	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0
TOTAL	19	177	225	122	23	2	568	10	144	261	114	30	5	564
PCT	.4	3.4	4.3	2.3	.4	*	10.9	.2	2.8	5.0	2.2	.6	.1	10.8

HGT	S							SW							TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+		
<1	.1	.5	.0	.0	.0	.0	34	.2	.7	.0	.0	.0	.0	48	
1-2	.1	1.7	1.9	.0	.0	.0	194	.1	2.0	1.5	*	.0	.0	187	
3-4	*	.9	2.6	.4	.0	.0	202	*	1.1	2.5	.3	.0	.0	201	
5-6	.0	.1	1.9	.4	.2	.0	134	*	.2	2.0	.6	*	.0	146	
7	.0	*	.7	.5	.1	*	70	.0	.2	.6	.4	*	.0	62	
8-9	.0	*	.1	.1	.1	.0	19	.0	.1	.3	.3	.1	.0	38	
10-11	.0	.0	.2	.2	.2	*	35	.0	*	.2	.3	.1	.0	32	
12	.0	.0	.2	.2	.1	.0	27	.0	.0	.1	.3	.1	.0	25	
13-16	.0	.0	.1	.2	.2	.0	29	.0	*	.2	.3	.2	*	36	
17-19	.0	.0	.1	.2	.1	.0	16	.0	.0	*	.1	.1	.0	13	
20-22	.0	.0	.0	.1	*	*	6	.0	.0	.0	.0	.2	.0	9	
23-25	.0	.0	.0	.0	*	*	2	.0	.0	.0	*	*	.0	3	
26-32	.0	.0	.0	.0	.0	.0	1	.0	.0	.0	.0	*	.0	1	
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	0	
TOTAL	13	177	401	121	52	5	769	15	227	383	136	41	1	803	
PCT	.2	3.4	7.7	2.3	1.0	.1	14.7	.3	4.3	7.3	2.4	.8	*	15.3	

HGT	W							NW							TOTAL	GRAND TOTAL
	1-3	4-10	11-21	22-33	34-47	48+	TOTAL	1-3	4-10	11-21	22-33	34-47	48+			
<1	.2	.5	.0	.0	.0	.0	38	.2	.7	.0	.0	.0	.0	.0	44	335
1-2	.2	2.8	1.6	.0	.0	.0	240	.1	1.3	1.4	.0	.0	.0	.0	142	1317
3-4	.0	1.2	3.2	.4	.0	.0	252	*	.6	1.9	.1	.0	.0	.0	138	1275
5-6	.0	.2	1.9	.7	.0	.0	145	.0	.1	1.0	.4	.0	.0	.0	76	770
7	.0	*	1.2	.9	*	.0	112	*	.1	1.0	.5	.0	.0	.0	80	540
8-9	.0	*	.4	.5	.0	.0	51	.0	*	.2	.3	.1	.0	.0	32	255
10-11	.0	.0	.4	.6	.1	*	62	.0	*	.3	.4	*	.0	.0	40	265
12	.0	.0	.1	.1	.1	.0	17	.0	.0	*	.2	*	.0	.0	10	128
13-16	.0	*	.1	.4	.1	.0	33	.0	.0	*	.2	.1	.0	.0	17	212
17-19	.0	.0	.0	.0	*	.0	1	.0	.0	.0	.0	*	.0	.0	1	65
20-22	.0	.0	.0	.1	.0	.0	5	.0	.0	.0	.0	.1	.0	.0	3	47
23-25	.0	.0	.0	*	.0	.0	1	.0	.0	.0	.0	*	.0	.0	1	11
26-32	.0	.0	.0	.0	.1	*	9	.0	.0	.0	.0	.0	.0	.0	0	12
33-40	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	0
41-48	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	0
49-60	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	0
61-70	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	0
71-86	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	0
87+	.0	.0	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	.0	.0	0	0
TOTAL	22	250	470	195	26	3	966	14	145	298	111	16	0	584	5232	
PCT	.4	4.8	9.0	3.7	.5	.1	18.5	.3	2.8	5.7	2.1	.3	.0	11.2	100.0	

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TABLE 18 (CONT)

HGT	WIND SPEED (KTS) VS SEA HEIGHT (FT)										TOTAL OBS
	0-3	4-10	11-21	22-33	34-47	48+					
<1	7.8	4.6	.0	.0	.0	.0					696
1-2	1.1	12.9	9.8	*	.0	.0					1340
3-4	.1	6.0	14.9	1.8	.0	.0					1278
5-6	.1	.8	9.4	3.1	.3	.0					771
7	*	.3	5.0	3.9	.3	*					540
8-9	.0	.2	1.5	2.4	.4	.0					255
10-11	.0	.1	1.5	2.4	.6	.1					265
12	.0	.0	.5	1.2	.5	.0					128
13-16	.0	*	.6	2.0	1.0	.1					212
17-19	.0	.0	.1	.7	.3	*					65
20-22	.0	.0	*	.3	.5	*					47
23-25	.0	.0	.0	*	.1	.1					11
26-32	.0	.0	.0	*	.2	*					12
33-40	.0	.0	.0	.0	.0	.0					0
41-48	.0	.0	.0	.0	.0	.0					0
49-60	.0	.0	.0	.0	.0	.0					0
61-70	.0	.0	.0	.0	.0	.0					0
71-86	.0	.0	.0	.0	.0	.0					0
87+	.0	.0	.0	.0	.0	.0					0
TOTAL	513	1400	2442	1008	238	19					5620
PCT	9.1	24.9	43.5	17.9	4.2	.3					100.0

TABLE 19

PERCENT FREQUENCY OF WAVE HEIGHT (FT) VS WAVE PERIOD (SECONDS)

PERIOD (SEC)	<1	1-2	3-4	5-6	7	8-9	10-11	12	13-15	17-19	20-22	23-25	26-32	33-40	41-48	49-60	61-70	71-86	87+	TOTAL	MEAN HGT
<6	1.1	12.6	11.3	5.0	1.9	.6	.4	.1	.1	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	2698	3
6-7	*	1.6	5.7	5.8	4.1	2.2	1.8	.9	.9	.3	.2	*	*	.0	.0	.0	.0	.0	.0	1925	6
8-9	.0	.6	3.0	2.3	3.6	1.5	2.4	1.2	1.9	.7	.4	.1	.1	.0	.0	.0	.0	.0	.0	1450	8
10-11	.0	*	.1	.2	.2	.4	.5	.1	.3	.3	.2	.1	*	.0	.0	.0	.0	.0	.0	201	11
12-13	.0	.0	*	*	.1	*	.2	.1	.1	*	*	*	*	.0	.0	.0	.0	.0	.0	57	11
>13	.0	.0	.0	.0	*	*	.1	*	.1	.1	.1	*	*	.0	.0	.0	.0	.0	.0	36	15
INDET	21.6	*	*	*	*	*	.0	.0	*	.0	*	.0	.0	.0	.0	.0	.0	.0	.0	1767	0
TOTAL	1850	1211	1635	1087	802	396	448	201	283	111	77	19	14	.0	.0	.0	.0	.0	.0	8134	4
PCT	22.7	14.9	20.1	13.4	9.9	4.9	5.5	2.5	3.5	1.4	.9	.2	.2	.0	.0	.0	.0	.0	.0	100.0	

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TABLE 20

PERCENT FREQUENCY OF OCCURRENCE OF SEA TEMP (DEG F) BY MONTH

SEA TMP DEG F	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	PCT
96+	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
95/96	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
93/94	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
91/92	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
89/90	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
87/88	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
85/86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
83/84	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
81/82	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
79/80	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
77/78	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
75/76	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
73/74	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
71/72	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
69/70	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
67/68	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
65/66	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
63/64	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
61/62	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
59/60	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
57/58	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
55/56	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1	*
53/54	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	11	.1
51/52	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	85	.5
49/50	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	297	1.8
47/48	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	675	4.2
45/46	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1195	7.4
43/44	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2615	16.3
41/42	5.2	.3	1.1	.2	.7	8.4	12.8	15.0	21.3	10.7	1.5	.0	2507	15.6
39/40	4.9	2.3	3.4	3.0	3.1	24.3	36.0	33.1	32.5	28.9	4.9	5.2	2513	15.6
37/38	28.4	26.0	12.2	19.7	15.6	35.0	25.5	13.1	18.9	33.8	14.2	17.2	2349	18.6
35/36	49.8	52.1	52.4	50.9	49.7	27.3	13.6	3.9	5.2	13.8	37.1	31.7	700	4.4
33/34	10.1	14.1	23.1	21.1	26.4	3.8	3.7	2.0	.4	3.3	35.8	27.4	111	.7
31/32	1.6	4.7	4.6	3.0	4.2	.3	3.1	.0	.0	.0	1.9	16.2	23	.1
29/30	.0	.6	1.7	.7	.0	.0	.0	.0	.0	.0	.0	.0	8	*
27/28	.0	.0	.4	.6	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
<27	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0
TOTAL	613	708	784	806	1763	3337	2352	2026	1499	923	741	536	16088	100.0
MEAN	38.3	37.7	37.3	37.5	39.2	41.4	44.4	46.8	46.4	44.6	41.0	38.9	42.2	

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TABLE 21

PRESSURE (MB)												
AVERAGE BY HOUR (GMT)												
MD	0000	0300	0600	0900	1200	1500	1800	2100	MEAN	TOTAL DBS	EXTREMES	
											MAX YEAR DA HR	MIN YEAR DA HR
JAN	995	991	999	990	1001	1001	1000	991	996	844	1034 1962 19 12	958 1964 22 00
FEB	997	997	999	995	998	999	999	995	997	872	1032 1950 01 00	960 1944 23 21
MAR	1007	1011	1006	1005	1007	1004	1008	1005	1006	1099	1036 1965 13 12	961 1949 09 06
APR	1011	1011	1011	1007	1012	1008	1012	1008	1010	1188	1042 1965 23 06	966 1943 08 00
MAY	1014	1010	1015	1010	1015	1009	1015	1010	1013	2318	1032 1965 11 18	971 1958 14 06
JUN	1012	1012	1012	1011	1012	1010	1012	1011	1011	4708	1055 1965 22 00	972 1956 10 09
JUL	1013	1013	1014	1013	1013	1013	1014	1013	1013	2451	1052 1965 28 06	983 1966 04 00
AUG	1013	1010	1012	1012	1012	1010	1011	1012	1012	2150	1046 1965 10 00	978 1944 07 00
SEP	1011	1006	1009	1011	1011	1007	1010	1011	1010	1865	1036 1944 20 00	974 1964 24 00
OCT	1011	1009	1011	1010	1011	1007	1009	1011	1010	1094	1044 1964 17 06	967 1965 11 12
NOV	1004	976	1004	1004	1005	995	1004	1005	1004	876	1044 1945 01 21	964 1952 03 03
DEC	1002	1013	1007	998	1007	1013	1005	997	1003	754	1047 1964 25 12	962 1965 18 06
ANN	1009	1011	1007	1008	1010	1010	1010	1008	1013	20219		
DBS	4785	889	3033	2215	3114	908	3012	2263				

PERCENTILES

MD	1%	5%	25%	50%	75%	95%	99%
JAN	962	972	988	996	1004	1017	1024
FEB	967	977	989	998	1005	1016	1022
MAR	969	979	998	1007	1016	1027	1033
APR	976	984	1001	1010	1021	1034	1039
MAY	982	989	1003	1014	1024	1034	1042
JUN	984	994	1005	1012	1018	1027	1034
JUL	987	995	1007	1014	1020	1027	1038
AUG	988	995	1005	1013	1018	1027	1032
SEP	981	991	1003	1011	1018	1025	1030
OCT	976	986	1002	1012	1019	1029	1038
NOV	966	977	994	1005	1014	1026	1039
DEC	966	974	993	1003	1014	1028	1043